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AN ANALYSIS OF APPRENTICESHIP TRAINING IN THE
NON-UNION SECTOR OF THE CONSTRUCTION INDUSTRY

David Michael Vander Els

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AN ANALYSIS OF APPRENTICESHIP TRAINING IN THE
NON-UNION SECTOR OF THE CONSTRUCTION INDUSTRY

by

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Submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Civil Engineering

at the

Massachusetts Institute of Technology
June, 1976

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by

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ABSTRACT

AN ANALYSIS OF APPRENTICESHIP TRAINING IN THE NON-UNION SECTOR OF THE CONSTRUCTION INDUSTRY

by

DAVID MICHAEL VANDER ELS

Submitted to the Department of Civil Engineering on 14 May 1976
in partial fulfillment of the requirements for the degree of
Master of Science in Civil Engineering.

The full employment economy of the late 1960's and simultaneous high demand for constructed facilities combined to create a shortage of skilled construction labor. This shortage resulted in enormous increases in the wages of skilled, union construction workers. The high cost of organized labor was a spur to the establishment and growth of the non-union sector of the construction industry. This sector is now responsible for over one half of the yearly dollar volume of in-place-construction in the United States.

The growth of the non-union sector of the construction industry has brought with it a need for increased numbers of skilled, non-union construction craftsmen. Apprenticeship training is a traditional, as well as an effective method to train craftsmen.

An apprenticeship program registered with the U.S. Bureau of Apprenticeship and Training is preferable to a non-registered program from both the contractor's and apprentice's standpoint. Registered programs are subsidized by the federal and state governments in numerous ways. Registered apprenticeship programs and the regulations and structure concerning them are founded on, and governed by, the principles and practices of trade unionism. This thesis analyses the adoption of a nominally union training system by the non-union construction industry.

Time limitations prohibited extensive statistical analyses of non-union apprentice programs. The analysis is based on qualitative insight gained while conducting six case studies of non-union contractors in one rural and one industrial New England state. In addition numerical data on apprenticeship are presented for the year 1974.

The conclusions show that the non-union sector of the construction industry has, to a large extent, adapted itself to the restrictions of registered apprenticeship programs, while availing itself of the advantages offered by these programs.

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I. INTRODUCTION

This thesis presents the findings of a study of apprenticeship training in the non-union sector of the U.S. construction industry. It has been organized into five chapters. The first chapter is the introduction; the remaining four chapters comprise the body of the thesis.

Chapter II is an overview of the present National Apprenticeship Program (NAP) including a brief history, present administrative procedures and a description of modern, union construction trade apprenticeship programs. The remaining two sections discuss the quality and numerical performance of the NAP.

Chapter III discusses non-union apprenticeship training and the non-union role in the NAP. The first section is a brief overview of non-union training methods. The second section deals with the problems of running a non-union program in the union world of apprenticeship training. Section three discusses similarities with union programs and the reasons they arise. The fourth section compares the numerical size of the non-union apprenticeship movement, and the extent of minority participation in it, with union apprenticeship programs.

Chapter IV contains in-depth case studies of six non-union apprenticeship programs in two New England states. (To preserve confidentiality, the names of firms and cities used in this thesis are fictitious.) The first section of Chapter IV describes the case study methodology in detail. The second section is devoted to a discussion of the political climate and general problems facing apprentice programs in the rural New England state studied; this is followed by case studies of three

non-union apprentice programs in that state. Section three contains a similar introduction to the industrial New England state studied, and three case studies of programs located there.

Conclusions of the study are presented in Chapter V. These conclusions are based on data gathered in the case studies, and on the background research presented in Chapters II and III.

The generality of these conclusions may be somewhat limited, since the study was confined to New England and to the non-union apprenticeship programs of a single contractor association. However, by studying both a rural and an industrial state, and by including programs of different trades and skill levels, it is felt that many of these conclusions may be broadly applicable to non-union apprenticeship training in other parts of the U.S.

II. THE NATIONAL APPRENTICESHIP PROGRAM (NAP)

This chapter is an introduction to apprenticeship training in the United States. The first three sections are an overview of the present apprenticeship system including a brief history, present administrative procedures, and a description of modern, union construction trade apprenticeship programs. The remaining two sections discuss the quality and numerical performance of the NAP.

II.1. HISTORY

In a typical apprenticeship during the Colonial Era a parent would indenture his son to a master craftsman in a given trade. The son would live with the craftsman for six to eight years and learn the trade working with the master. The master was obligated by the indenture agreement to feed and clothe the boy and to teach him the craft. Such "domestic apprenticeship" became less prominent with the coming of the Industrial Revolution, when training was confined to a regular work day and the apprentice was compensated by wages set at various percentages of the craftsman's rate. Apprentices would work full time and receive little or no schooling.

Tighter immigration policies following World War I permitted fewer old world trained craftsmen to fill the industrial needs of the United States. Concerned industry and labor groups desired a national apprenticeship system to train men for skilled jobs in the booming economy.

It was not until 1934 that a formal program was initiated at the federal level. The policy-advising body for that program was a Federal

Committee on Apprenticeship appointed by the Secretary of Labor. The program's chief aim was to promote apprenticeship.

In 1927 Congress passed a formal act, the National Apprenticeship Law, known as the Fitzgerald Act (Appendix A). The Law was an enabling act giving the Secretary of Labor broad administrative powers to promote and regulate standards of apprenticeship and to encourage the inclusion of Labor Department standards in formal apprentice contracts. The Secretary of Labor reorganized the Federal Committee on Apprenticeship to include representatives from labor, industry and the Department of Education. He also established a bureau that is now known as the Bureau of Apprenticeship and Training (BAT) to administer his responsibilities under the Fitzgerald Act.¹

II.2. BUREAU OF APPRENTICESHIP AND TRAINING

The BAT, following policy guidelines from the Federal Committee on Apprenticeship and the Secretary of Labor, registers apprentice programs that meet certain minimum training and administrative standards.

II.2.1. Training Standards

1. Work Processes - An outline of on-the-job-training (OJT) processes including the approximate time the apprentices will spend on each process.
2. Planned Related Instruction - Organized supplemental training to provide apprentices with knowledge of technical subjects related to their trade. A minimum of 144 hours per year is specified.
3. Progress Evaluation and Records - Periodic review of the apprentice's progress in both OJT and related instruction and maintenance of appropriate records.

4. Number of Apprentices to be Employed - A ratio of apprentices to journeymen consistent with proper supervision, training and continuity of employment.
5. Equal Opportunity in Apprenticeship - All programs conducted in a nondiscriminatory manner in accordance with Title 29, Code of Federal Regulations, part 30, (29 CFR 30, APP B).
6. Term of Apprenticeship - As established by industry practices, but not less than one year or 2000 hours.
7. Probationary Period - For a reasonable time in relation to the apprenticeship term, with full credit towards apprenticeship completion.
8. Safety training - Must be included in both OJT and related instruction.

II.2.2. Administrative Standards

1. Union-Management Cooperation - Union management approval of the programs where a collective bargaining agreement exists.
2. Wages - A progressively increasing schedule of wages for apprentices. The entry wage must be at least equal to the Fair Labor Standards Act minimum where applicable, unless a higher wage is required by state law or regulation.
3. Recognition for Completion of Apprenticeship - Completion acknowledged by an appropriate certificate.
4. Qualification for Apprenticeship - Uniform qualifications applying equally to all applicants.
5. Minimum Age - An apprentice must be at least 16 years old.
6. Apprenticeship Agreement - A formal agreement pursuant to state apprenticeship laws or BAT policy where no state laws exist.
7. Credit for Previous Experience - Credit should be given for previous experience towards completion of OJT and related training, required hours.²

Twenty-nine states have state apprenticeship councils (SAC). These states have enacted apprenticeship laws of their own. In an SAC state an apprentice program is registered with the state. In a non-SAC state,

apprenticeship programs are registered directly with the BAT.

BAT recognizes state agencies whose programs meet certain minimum standards set by the Federal Committee on Apprenticeship. To receive such federal approval, a state apprenticeship program must be administered by a state's Department of Labor and must meet several other standards....³

The other standards are the same ones the BAT requires of programs registered directly with the BAT. BAT has offices and field representatives in every state. The relationship between the BAT field office and the state's field office varies with the states. In some SAC states the state will have its own field representatives and in others the federal BAT field men will service all programs. In some states BAT agents will service some programs and the state agents other programs. Both the federal and state agents' duties are similar: to aid in establishing new programs, to check existing programs for compliance with federal and state regulations and to assist men desiring to enter a program to find one that suits their needs.

The regulations governing apprenticeship, except those concerning equal opportunity, 29 CFR 30, are actually BAT and SAC policy. The policy is enforced by withholding registration or withdrawing registration from companies or states that do not meet BAT standards. The BAT is now formulating a document that will formalize the registration standards and process. The proposed document will be known as 29 Code of Federal Regulations Part 29, (29 CFR 29), (see Appendix C).

Before the BAT will register a program, the program must not only meet the training and administrative standards described previously, it must also train men in a trade recognized as apprenticeable. The BAT lists apprenticeable occupations. Their criteria for recognizing an

occupation as apprenticeable require that the occupation:

1. Is learned through experience and training on the job, supplemented by related technical instructions.
2. Involves manual, mechanical, or technical skills and knowledge, requiring a minimum of 2,000 hours of work experience including related instruction.
3. Is not part of an apprenticeable occupation recognized by the Bureau of Apprenticeship and Training unless it is practiced industrywide as an identifiable and distinct trade.
4. Involves the development of skills broad enough to be applicable throughout an industry.
5. Does not fall primarily into any one of the following categories: (a) selling, (b) managerial, (c) clerical, and (d) professional.⁴

Because apprenticeship is a voluntary program there is no judicial appeal for companies or contractors who have difficulty registering an apprentice program. They must negotiate with BAT personnel. The authority for the BAT and their regulations is the Fitzgerald Act, which charged the Secretary of Labor with responsibility for apprenticeship standards.

A registered program provides certain benefits for the contractor and the apprentice. Apprentices registered with the SAC or BAT may be paid the apprentice wage on federal and state construction projects where prevailing wages (determined by the Department of Labor) must be paid as per the Davis Bacon Act of 1931. A man doing electrical work would be paid the prevailing wage for electricians, unless he is a registered electrician apprentice whereupon he would be paid the apprentice rate, which is considerably lower. Electrician apprentices in unregistered programs would have to be paid the full electrician rate. In addition, apprentices in registered programs are eligible for Veteran's Administration benefits. A third advantage to a registered program is the mobility it gives the

apprentice graduate. The graduate receives a completion certificate nationally recognized as attesting to the minimum standards of his program. He may therefore travel to jobs in geographic areas other than his own and receive the established journeyman rate.

II.3. MODERN, UNION CONSTRUCTION TRADE PROGRAMS

Unlike his colonial predecessor today's union construction apprentice is not indentured to a single craftsman or even a single company. He is indentured to a Joint Apprenticeship Committee (JAC) whose program is registered with an SAC or the BAT. This committee is composed of union officials of a given craft. If collective bargaining is done by a contractor's association representing many of the contractors, the contractor representation on the JAC is often composed of association officials or members. The local JAC is sensitive to the needs of the local labor market and indentures apprentices accordingly.

Most building trades have national JAC's. These committees make recommendations to the local JAC's concerning subjects to be included in related training curriculums, allocation of OJT hours to various work processes, entry requirements and length of apprenticeship. Some national JAC's print curriculums and texts for related training. Rules concerning apprentice hours, wages, training and the ratio of apprentices to journeymen are included in collective bargaining agreements.

The construction craft union has several interests to defend by actively participating in apprenticeship programs. Felician E. Foltman of the University of Cornell's school of Industrial and Labor Relations listed these interests for the U.S. Senate Committee on Labor and Public

Welfare:

To protect the Journeyman's wage from being undercut.
To assure apprentices a good chance to learn the trade.
To assure apprentices a reasonable rate of pay.
To prevent the trade from being flooded with too many journeymen.

More recently, according to Slichter and his associates, some unions have been encouraging training programs, not to reduce the number of craftsmen but for opposite reasons; namely to build up an adequate supply of craftsmen so that their crafts can compete for work. Faced with excessively high wage costs or possible schedule delays because of the shortage of really qualified draftsmen, architects, and contractors may decide that new products and processes which do not require skilled craftsmen may be a good long-term solution. Some unions are aware that they are not in a position to control these technological changes so they strive to be competitive with the new technology and the changed labor costs.⁵

The JAC sets the entry standards for their apprenticeship program. Usually the JAC will require a high school diploma although judicial action based on civil rights litigation has eased this requirement in some areas.⁶ Other common requirements are aptitude tests and age limitations (usually 18-25). Often the age limitations are raised a number of years to allow veterans to enter the program. Men who meet the minimum requirements of the JAC are often interviewed orally, and ranked according to criteria the committee considers relevant. Apprentices are then selected from the group interviewed.⁷

The cost of apprenticeship is borne by the apprentice, the employer, the JAC and the public. Apprentice wages usually start at 50% of the journeyman's wage and increase at six month intervals until completion of the program when the apprentice earns the journeyman rate. The apprentice pays for his training in several ways. During the early, low paying years of his training he foregoes higher wages he might earn at another job. In the later years of his apprenticeship he might have all

the skills of a journeyman and the same productivity of a journeyman but will be paid the lower, apprentice rate. There is an opportunity cost involved, the apprentice may or may not have been able to engage in an alternate training program.

The employer pays a direct cost of apprenticeship. This cost is a few cents an hour for each union worker employed, and is negotiated in the collective bargaining agreement. This money goes to support JAC operations including administration costs and in some instances the salary of a full-time JAC training coordinator. During the early years of an apprenticeship the employer may be losing money if the apprentice's productivity is not equal to his pay. Conversely however, the employer is saving money if the apprentice's productivity is greater than his wage. The journeyman must take time off from his normal work to ensure the apprentice is performing well.

The JAC cost involves the time the committee members must commit to the JAC as well as direct costs such as for administration and program promotion.

The public also pays for apprenticeship. Related Instruction teachers are often paid with state and federal education funds. The cost of the BAT and state apprenticeship bureaus are, of course, also borne by the public.⁸ Apprenticeship training is a bargain for the taxpayer when compared to other forms of training; an example is the California program.

In California we spend an estimated \$130 per year per apprentice. This is substantially more than is spent in any other state, but it is substantially less than is needed. Only about \$50 of this cost is spent by the Division of Apprenticeship Standards in maintaining and servicing existing programs

and promoting new apprentice opportunities. The remaining \$80 per year goes to covering the cost of related classroom instruction. This compares to a cost of approximately \$1900 per year for maintaining a student at the University of California and an average of \$1170 per year per student in the state college system.⁹

Apprentice admission requirements and length of the apprenticeship programs are different for each construction trade and often differ between localities in the same trade. The longest construction apprentice program is five years for plumbers and pipe fitters, while the program for bricklayers is only three years. Generally the more skilled trades such as plumbers, electricians, and sheet metal workers have higher entry standards than less skilled trades such as ironworkers and carpenters. The differences between these requirements in six trades (plumbers, sheet metal workers, electricians, ironworkers, carpenters and bricklayers) were studied in detail by Marshall, Glover and Franklin in "Training and Entry into Union Construction." The reader should consult this work for more information on the entry requirements of the six crafts.¹⁰

A common misconception about building trade apprenticeship programs is that apprenticeship is the only way to enter the union. This is not true. The percentage of a local's members who are apprentice-trained depends on the trade, the area, and the date the question is asked. The higher the skill level of the trade generally, the greater the percentage of members who have completed an apprenticeship. It is not unusual for plumber and electrician locals to have 80% of their members apprentice-trained while bricklayer and carpenter locals might have only 20-30%. If construction is booming it is easier to get into a union and the membership may be swelled by more men who are informally trained.

Informal training is the common way to learn a trade. Most union

construction workers learned their craft this way. Men can learn a trade by working as a laborer for several years and watching a craftsman work. Many bricklayers, carpenters and operating engineers were former laborers. Some men learn a trade while working on the job in a non-union shop and then work on permit for a union contractor. The permit is a method allowing a man to work for a union contractor while not belonging to the union. Permits are issued by a union during periods of high construction volume. Rather than swelling the union's ranks with new members, permits are issued to temporary workers. The rules vary with the craft and locality, but often a man can join the union after a specified amount of time on permit. Vocational schools, military training schools, and experience in a trade as an industrial worker are also common ways to learn a craft. Men who learn the trade informally and enter the union after a time on permit, are said to enter through the "back door." Naturally more men "come in" through the "back door" during periods of high construction activity than otherwise.

Business agents assert that the "back door" has been closing over the years. The data from the Marshall report, except for sheet metal and ironworkers shows that unions have not been successful in closing the "back door." Marshall further states:

...there are a number of factors which make it difficult for unions to rely exclusively on apprenticeship as a source of journeymen. For one thing, many craftsmen have learned the trade by other means and could undermine union conditions if they were not organized. Unions will therefore have less rigorous entry requirements in places where there are many workers in open shops, as in Houston, or where there are other industries turning out craftsmen, who could work in the construction industry. in our sample, shipyards, oil fields, and industrial maintenance crews were important sources of craftsmen in some trades.

The unions' ability to rely on apprenticeship also will depend on the ease or difficulty of learning the trade without related or classroom instruction. Since parts of even the most demanding trades can be learned on the job, unions always will have some pressures from those who learn their trades from on the job training alone. However, the bricklayers, carpenters, and ironworkers face stronger external supply pressures than the sheet metal workers, electricians, and plumbers and pipefitters.¹¹

In some areas unions have been able to close the back door by law. In Ontario, Canada certain trades are certified and only apprentices in a certified program or certified mechanics may work in the trade. To become a certified mechanic you must pass the certification exam, in order to take the exam you must have completed a certified apprenticeship. In Wisconsin plumbers have similar requirements.¹²

II.4. QUALITY OF APPRENTICE TRAINING

II.4.1. Value of Broad Training

A traditional union aim regarding apprenticeship is to ensure that the apprentice receives broad training, exposing him to all aspects of his craft. Thus, a carpenter apprentice should be learning residential carpentry as well as form building and an electrician should be able to do more than bend pipe and "pull wire." A journeyman who is thoroughly trained in his craft is not limited to one particular type of work. His chances of obtaining year-round employment are better than those of the specialist.

Although semiskilled or partially skilled workers are very useful to management they cannot work in slack periods. For example, a semiskilled carpenter could not stay on a particular job for its duration, doing both rough and finished carpentry. Employers say that the apprentice program

overtrains a man, while the unions resist any reduction of skills, claiming that narrow jobs tend to limit employment.¹³

One result of the broad training apprentices receive is the widely held belief that the training is actually geared more towards developing foremen and supervisors than craft journeymen. George Strauss of Berkeley remarked on this:

...the function of apprenticeship today seems to be largely that of training skilled keymen, and the proportion of job entrants provided by each trade's apprenticeship program seem to be related to the skill mix that trades require.¹⁴

Although apprenticeship programs are designed to train journeymen, several studies have shown that the percentage of apprentice-trained foremen and supervisors of a given trade is generally greater than the percentage of apprentice trained journeymen to all journeymen of a craft.

One of the aims of the Marshall report for the Department of Labor was to determine if apprenticeship provided the best available craft training. Marshall and his associates reasoned that if apprenticeship did provide the best training as most trade experts claim, then apprentice trained journeymen, with their broader training, would be considered more valuable to contractors and would thus work more often and suffer less layoffs than informally trained craftsmen. They checked their theory by studying union pension eligibility records where hours worked are recorded. In 32 of the 71 locals studied, apprenticeship trained journeymen worked consistently and significantly more than journeymen trained in other ways. In only three locals did they work less than journeymen without apprentice training.¹⁵

The Marshall group reasoned further that the percentage of apprentice

trained supervisors and foremen should be greater than the percentage of apprentice trained journeymen in a given local, if apprenticeship was the best training method. In 19 of 28 cases studied that theory was substantiated; in five cases the percentage of apprentice trained journeymen was greater than the percentage of apprentice trained supervisors and in the remaining cases the results were inconclusive.¹⁶

Many sources make the claim that apprentice trained journeymen are more likely to rise to supervisor and foremen levels of responsibility. Few speculate whether this is because of excellent apprentice training or because the apprentice programs are selective, indenturing intelligent, ambitious people who might have become leaders without the programs.

II.4.2. Related Training (Night School)

All registered apprentice programs devote some time to classroom instruction on mathematical, theoretical and legal/regulatory aspects of the trade. The BAT requires 144 hours of this related training, which is based on a standard 36 week school year, with classes of 2 hour duration taught two nights a week. There are no specific guidelines from the BAT on what should be included in related training other than that it should be related to the trade. Because of this the quality of the programs varies widely and related training serves different purposes for different programs, depending on the craft. Some evening programs serve as an explanation clearinghouse. Many questions raised on the job cannot be properly answered by a foreman or a journeyman because of time limitations. This occurs commonly in carpenter programs. For plumbers and electricians a great deal of related training time is spent studying the applicable

cades. For operating engineer apprentices, who spend a great deal of OJT time as flagmen and oilers, the evening training often ends up compensating for lack of on the job experience.¹⁷

Researchers have attacked related training programs on two fronts. One of these is the structural, or physical characteristics of the training. Classes are usually taught at night when apprentices are tired. Often the apprentice must travel from distant job sites to the schools. In many cases there are not enough apprentices in a given trade to justify a separate program for that trade, let alone separate classes and teachers for first, second, third and fourth year men of that one trade. As a result some classes are mixed by trade as well as by experience level. Instructors must divide their time between groups in a single classroom, or risk giving lectures that go over the heads of less experienced apprentices or that are too fundamental for more experienced ones. Open admissions policies of some programs compound these problems by admitting students in January to classes that begin in September.¹⁸

Researchers also criticize course content and application of related instruction to on-the-job training. Swanson, Horowitz and Herrnstadt of Northeastern University, studying programs in Boston, report that the public school system provides a poor bridge from school to work. Math, reading and writing which should be learned in public school is often retaught to apprentices in related training. Apprentices who do have adequate reading and math skills are often given no credit for them and spend their first years of related training undergoing unnecessary review of these skills.¹⁹ Theory learned in related training is not immediately reinforced with practical work on the job, reducing the value of the

instruction. The lack of coordination of related training with OJT would not be as damaging to the learning process if evening instructors had shop facilities for demonstration purposes. Some instructors do have shop facilities and make good use of them. In other cases program administrators shrug off the value of shop facilities claiming that OJT is supposed to take care of practical application. If the apprentice is receiving broad OJT with the opportunity to do varied work in his trade this is true. If, on the other hand, the apprentice consistently does the same task on the job, as is often the case, theory learned at night is not applied and is forgotten.

As with anything else, related training could be improved in this country as a whole. The value of the present system, despite the criticism noted, is that it provides a forum to answer questions that arise on the job and it exposes the apprentice to theory, layout work, blue print reading and other topics which informally trained craftsmen learn less perfectly, if at all.

II.4.3. On-The-Job Training (OJT), Work Processes

Each registered apprentice program has a list of work processes. Each process is a task that a qualified journeyman of the trade should be able to perform competently. The OJT hours (a four year program would involve 8000 hours of OJT) are divided between work processes, more hours being assigned to processes considered of primary importance. Thus, the carpenter program assigns 1200 hours to the "form building" work process, 1500 hours to "inside finishing" and only 300 hours to "plastics and resilience."²⁰ The difficulty with OJT develops as soon as the apprentice is

indentured and is put to work. It becomes obvious to him that he is not going to spend 1200 hours in four years building forms. if he is working for a commercial contractor he may spend the first 2000 hours fetching coffee and tools for journeymen carpenters and the next 6000 hours building forms. Few contractors can afford to rotate a man so that, using the carpenter example, the apprentice gets 1500 hours of inside finish work, 1200 hours of framing etc. If the contractor does no residential work the man may get no framing, stair building, or finish work.

Every apprentice questioned on a 1953 San Francisco study had skipped training in at least one major aspect of his trade listed in its standards. Forty-four percent of completed carpenter apprentices studied by Sara B. Smith reported that they had no training in stair building, though this was a required area of training.²¹

One suggestion to remedy the lack of broad training in OJT is to rotate the apprentice between contractors who specialize in various aspects of a trade. Generally this is impossible due to the administration and record keeping involved as well as the fluctuation and volatile nature of the construction market. There may well be no residential construction of any consequence during an apprentice's tenure, however commercial and industrial work might be booming. The value of OJT is dependent on the luck of the apprentice in getting assigned to a variety of jobs involving the various aspects of his trade, as well as assignments to journeymen who are good instructors and take an interest in bringing a new man along.

II.5. NUMERICAL PERFORMANCE OF THE NAP

Throughout the full employment economy of the mid and late sixties, public attention was drawn to rising construction costs. A major

component of that rise was due to the shortage of skilled construction workers and the increased wages they could command due to the shortage. The method of training these men fell under close public scrutiny and during this time an oft heard argument was that the apprentice programs were incapable of producing the number of skilled craftsmen needed for present and future construction.

In a 1963 report on manpower requirements the Secretary of Labor pointed out:

Apprentice programs of the current magnitude will not supply enough skilled workers even to replace those who die, retire, or transfer out of their occupation in the years ahead--without any allowance for the large additional needs for journeymen to staff new positions expected in many trades.²²

Opponents of the present apprentice system focused on several issues claiming that the training (3-5 years) is longer than necessary, that the unions deliberately restrict the number of apprentices, that selection standards are too high and that contractors do not hire enough apprentices. Without going too deeply into the merits of the above arguments, the reason for the lack of what some critics would term "adequate numbers of apprentices" can be fairly easily ascertained, particularly in light of the recent recession and unemployment rates in construction bordering on 40% in many areas.²³

First and foremost, a construction trade apprentice is an employee who is wholly dependent on the whims of the volatile construction labor market. Students of this market understand that it varies seasonally as well as with the economic cycle. Put simplistically, when construction is at a boom point in its cycle, such as the summer of 1969, it can support a lot more workers than it can at a low such as the winter of 1975.

In 1970 construction contractors provided 3.4 million year-long jobs, but employed 6 million men at one time or another during the year.²⁴ This means that a lot of men had part-time jobs in construction. The construction industry has a core of expert tradesmen who work most of the time. This core is expanded by part-time workers during seasonal and economic peaks. JAC's, which indenture the apprentices, are engaged in recruiting and training for the *core* of full-time workers. Apprentices, committed to a four year formal training program, involving school hours after eight hours of exhausting construction labor, are not engaged in the program to learn a part-time job. Thus, the contractors and unions indenture only as many apprentices as they can employ on a year-round basis. Exhortations to increase the number of apprentices by government, the public, academicians and national union staffs fall on the deaf ears of the local JAC's who are accountable to the hard facts of local economics. Arguments about the length of training, the rigors or alleged fairness of the selection process, and the numbers of apprentices contractors train are arguments about symptoms of construction instability.

...What is needed as a first requisite toward more efficient operation is stabilization - stabilization of wages, of employment, of working conditions. Unless these are assured, to talk of eliminating rules which have their inspiration in unstable working conditions is to overlook the cause and to deal only with the effect.²⁵

Until the public can guarantee jobs in construction it will be impossible to fully train all of the craftsmen needed for a boom. Apprenticeship is the training method for the core construction workers; the part-time men do not require the broad training of the complete journeyman.

II.5.1. Dropouts

Unlike their European counterparts who undergo apprenticeships during and in conjunction with their secondary schooling, American apprentice programs are based on post secondary school training. Because of this apprentices are older and must simultaneously undergo the problems and responsibilities of young adulthood, such as marriage, children, mortgages, car payments, and the rigors of the apprenticeship program. Often the combined demands are too much and the apprentice drops out of the program. The BAT calls these dropouts cancellations. Since 1941 the BAT has only recorded two years where the number of graduates of registered programs exceeded the number of cancellations. In 1974 there were 56,292 cancellations and only 46,454 graduates (see Table II.1). Many times a man realizes he does not enjoy working on construction jobs, where the work is dirty and dangerous, and drops out of the program. Reese Hammond, an official of the International Union of Operating Engineers offers a somewhat unsympathetic view of the apprentice dropout.

While apologists for dropouts present many arguments to persuade us that apprenticeship is overlong, the economic facts suggest that the 3-4 years spent in an apprenticeship is a wise investment. In the operating engineers trade, an apprentice starts at 65% of the journeyman's rate - very seldom under \$4 an hour. Average hourly rates in manufacturing are \$3.81 per hour and in the service trades \$3.18 per hour.²⁶

II.5.2. Minorities

In 1967 minority apprentices comprised only 4.5% of the total number of apprentices.²⁷ By 1974 this percentage was increased to 16.5% (see Table II.1). There are four reasons for this marked increase in minority representation in apprentice training. First is the forced compliance

with 29 CFR Part 30, the regulations of the U.S. Department of Labor on Equal Employment Opportunity in Apprenticeship and Training (see Appendix B). The second reason was the development and use of Equal Employment Opportunity Commission/BAT (EEOC/BAT), form EEO-2, which requires JAC's, certain unions and private employers to report apprenticeship participation in a format providing spaces to be used to list the race of their apprentices. The third factor was the emergence of the Outreach Programs. Fourthly, numerous suits by civil rights groups and the Justice Department against JAC's have contributed to integrating apprenticeship by supporting the goals of 29 CFR 30.

29 CFR 30 is the Department of Labor's effort to bring the NAP into line with Title VII of the Civil Rights Act of 1964. The regulation required existing apprentice programs to develop affirmative action plans, revise selection procedures and include an equal opportunity pledge in their standards. In 1967, after three years of non-compliance on the part of many existing programs, the Department of Labor compelled paper compliance. On April 6, 1967, the BAT issued 604 notices of non-compliance to programs located in small cities and towns (JAC's in large cities had been in paper compliance for some time).²⁸ Peter Schoeman, President of the United Association (plumbers and pipefitters) opposed BAT moves for compliance to the point of instructing plumbers' locals not to comply with 29 CFR 30, claiming that the point selection system was an example of government interference at its worst.²⁹ Eventually the plumbing JAC's complied with 29 CFR 30; statistics later showed the plumbing apprentice programs as being one of the most segregated. Even by mid 1969 BAT records of federally serviced programs show that only the electrician

apprentice program with 3.6% minority apprentices, was as segregated as the plumbers who by that time were up to 4.4% (see Table II.2). By 1974, after the United Association had made significant efforts to enlist minorities, the percentage representation had climbed to 14% (derived from Table III.1).

Another victory for minority apprentices was the battle over EEOC/BAT form EEO-2. Before the advent of the form, individual programs did not have to list their apprentices by race. This led to each interest group making their own estimation of minority apprentice representation in the building trades. The April 18, 1967 issue of Daily Labor Reports reported an incident where representatives of the Building Trades Department defended their minority apprentice training record before the Senate Labor Committee. Senator Kennedy (D-MA) however, had statistics of his own that differed considerably from those of the Building Trades. On June 5, 1968 the EEOC published the first statistics derived from EEO-2 forms. The low percentages of minorities in construction apprentice programs were an embarrassment to the AFL-CIO Building Trades Department and the more skilled trades such as plumbers, electricians and sheet metal workers in particular.³⁰

As a result of the civil rights movement, 29 CFR 30, and the indisputable evidence provided by EEO-2 data the union construction industry, particularly the skilled trades, began to recruit blacks and other minorities. "Outreach programs" were funded by the federal government to recruit construction apprentices from ghetto neighborhoods. These programs administered by the AFL-CIO, National Urban League and the Workers Defense League gave classes utilizing the "cram" method to prepare

prospective apprentices for apprentice entrance exams. The program is still on-going. The national Urban League alone had placed 10,632 blacks into Apprentice Outreach Programs by July 1974.³¹

II.5.3. Statistics

Ever since the 1890's economists have written about apprenticeship as if it were in the process of rapid decay. Whatever the situation in the past, apprenticeship seems clearly on the up-swing today. In absolute numbers, registered apprenticeship is close to an all-time peak. In relative terms the total number of apprentices has been increasing more rapidly than the total number of craft workers.³²

After the Second World War the great number of returning veterans and the advent of the GI bill were responsible for quadrupling the number of new, registered apprentices (23,000 in 1945, 85,000 in 1946). Within four years the influx of young men increased the number of apprentices in training to 230,000. Not until 1969 would the NAP again be training this number of apprentices. In 1970 the total number of registered apprentices increased to 269,626 (January 1) and in 1971 to 278,451 (January 1), however there was a significant drop in the total number of apprentices in 1972 and 1973 due to low registration of new apprentices in 1971 and 1972. BAT personnel claim that this is typical of apprenticeship.

...namely, changes in overall apprentice levels are a reflection of changes in new indentures rather than changes in cancellations and completions.

This is probably due, in part, to the fact that recessions or economic declines tend toward more strongly influencing new indentures than cancellations or other exits.³³

In 1974 (January 1) the total number of apprentice registrations rose to 280,965 (see Table II.1.).

Tables II.1 through II.3 depict apprentice data:

Table II.1. - the total number of apprentices for all apprenticeable occupations by year from 1941 to 1974.

Table II.2. - the percentage of minority apprentices in various construction trades in 1969.

Table II.3. - percentage of apprentices in construction trades to total registered apprentices 1969 to 1974.

TABLE II.1.*

Registered Apprentices in Training (BAT & SAC; All Trades)

Year	In training on January 1--	New registrations	Completions	Cancellations	In training on December 31
1941	18,300	14,177	- 1,289	5,051	26,137
1942	26,137	20,701	2,011	4,683	40,144
1943	40,144	11,661	1,715	6,975	43,115
1944	43,115	7,775	2,122	8,197	40,571
1945	40,571	23,040	1,568	5,078	56,965
1946	56,965	84,730	2,042	8,436	131,217
1947	131,217	94,238	7,311	25,190	192,954
1948	192,954	85,918	13,375	35,117	230,380
1949	230,380	66,745	25,045	41,257	230,823
1950	230,823	60,186	38,533	49,747	202,729
1951	202,729	63,881	38,754	56,845	171,011
1952	172,477	62,842	33,098	43,689	158,532
1953	158,532	73,620	28,561	43,333	160,258
1954	160,258	58,939	27,383	33,139	158,675
1955	158,675	67,265	24,795	26,423	174,722
1956	174,722	74,062	27,231	33,416	188,137
1957	189,684	59,638	30,356	33,275	185,691
1958	185,691	49,569	30,647	26,918	177,695
1959	177,695	66,230	37,375	40,545	166,005
1960	172,161	54,100	31,727	33,406	161,128
1961	161,128	49,482	28,547	26,414	155,649
1962	155,649	55,590	25,918	26,434	158,887
1963	158,887	57,204	26,029	26,744	163,318
1964	163,318	59,960	25,744	27,001	170,533
1965	170,533	68,507	24,917	30,168	183,955
1966	183,955	85,031	26,511	34,964	207,511
1967	207,511	97,896	37,299	47,957	220,151
1968	207,517	111,012	37,287	43,246	237,996
1969	237,996	123,163	39,646	47,561	273,952
1970	269,626	108,779	45,102	53,610	279,693
1971	278,451	78,535	42,071	43,104	274,024
1972	247,840	103,527	53,059	56,750	264,122
1973	243,956	133,258	43,580	49,860	283,774
1974	280,965	112,830	46,454	56,292	291,049

(continued next page)

*Information supplied by BAT personnel.

TABLE II.1. (cont'd)

NOTE: The annual reports providing figures for specific years contain numerous footnotes clarifying data and explaining data omissions.

CY74:	Black	8.8%	<u>Minority Accessions</u>	
			CY74	18.2%
	Oriental	.3%	(CY73	16.8%)
	Amer. Indian	1.1%		
	Spanish	3.8%		
	N.E.C.	2.5%		
	Total Minority	16.5%	(CY73:	15.5%)

TABLE II.2.*

Participation by Minorities in Federally-Serviced Apprenticeship Programs
January 1, 1969

<u>Selected Crafts</u>	Total	Negro	Indian	Spanish	Oriental	% Min- ority	% Negro
Brick, Stone & Tile	7,166	729	38	143	0	12.7	10.2
Carpenters	18,139	733	114	401	314	8.6	4.0
Cement Masons	1,500	350	4	54	1	27.3	23.3
Electricians	17,217	346	89	164	18	3.6	2.0
Glaziers	671	19	1	17	1	5.7	2.8
Iron Workers	5,068	106	66	117	2	5.7	2.0
Lathers	874	92	0	22	0	13.0	10.5
Painters	4,074	223	29	139	64	11.2	5.5
Plasterers	525	94	2	17	0	21.5	17.9
Plumbers-							
Pipefitters	20,164	402	109	243	132	4.4	2.0
Roofers	2,412	464	39	145	0	26.9	19.2
Sheet Metal Workers	10,107	260	26	168	104	5.5	2.6
<u>Construction Industry</u>							
Jan. 1, 1968	78,119	2,587	443	1,633	706	6.9	3.3
Jan. 1, 1969	91,177	3,728	543	1,684	648	7.2	4.0
<u>Other Industries</u>							
Jan. 1, 1969							
Metal Manufacturing	39,686	1,174	65	436	15	4.3	3.0
Manufacturing, Non-Metal	10,747	342	12	194	14	5.3	3.2
Public Utilities & Transportation	4,763	183	7	38	2	4.9	3.9
Trade, Service, & Miscellaneous	18,153	1,054	28	517	106	9.4	5.8
Mining	1,561	80	0	114	2	12.5	5.1

Source: Bureau of Apprenticeship and Training, U.S. Department of Labor

*Table from Manpower Information Service (MIS-RF-17; 21:1957).

TABLE II.3.*

Percentage of Registered Apprentices in
Construction and Other Trades

Year	Total	Construction Trades	Other Trades
1974	100.0	62.5	37.5
1973	100.0	63.6	36.4
1972	100.0	58.8	41.2
1971	100.0	51.8	48.2
1970	100.0	57.6	42.4
1969	100.0	50.0	50.0

*Information supplied by BAT personnel.

II.6. CHAPTER II FOOTNOTES

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21. Strauss, p. 15.
22. Richard A. Lester, "The Role of Organized Labor," in Toward a Manpower Policy, edited by Robert Gordon (N.Y., 1967), p. 322.
23. For in-depth analysis of these criticisms see: Mills, pp. 187-241, and U.S. Department of Labor, Manpower R & D Monograph No. 37, Apprenticeship Training in the 1970's: Report of a Conference.
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25. Ibid, p. 190.
26. Reese Hammond, "A Trade Union Perspective on Apprenticeship Research," in Apprenticeship Training in the 1970's: Report of a Conference, Report for the U.S. Department of Labor, Manpower Administration, Manpower R & D Monograph 37 (Wash., D.C., 1973), p. 36.
27. DLR, 4 November 1969, No. 214, p. A-6.
28. DLR, 6 April 1967, No 67, p. A-9.
29. DLR, 29 March 1967, No. 61, p. A-8.
30. DLR, 5 June 1968, No. 110, p. A-4.
31. DLR, 1 July 1974, No. 127, p. A-2.
32. Strauss, p. 11.
33. Unpublished BAT report, kindly furnished by BAT personnel.

III. NON-UNION APPRENTICESHIP TRAINING

This chapter discusses non-union apprenticeship training and the non-union role in the NAP. The first section is a brief overview of non-union training methods. The second section deals with the problems of running a non-union program in the union world of apprenticeship training. Section three discusses similarities with union programs and the reasons they arise. The fourth section compares the size of the non-union apprenticeship movement and minority participation in it, with union apprenticeship.

III.1. OVERVIEW

Most non-union firms are small contractors engaged in residential construction. These firms usually conduct no formal instruction. What formal training does exist comes from outside of construction altogether, from the union sector of the construction industry, or from some larger non-union firms and their associations.

For the most part skills are acquired informally and haphazardly through experience on the job. The result is that few workers develop a broad range of skills at their craft, and many can function only under the careful supervision of a foreman or the employer himself.¹

The non-union sector is in general dependent on skilled supervisors to direct the work. During construction booms these men often leave residential and low paying non-union commercial construction employers and take jobs in the higher paying union sector of construction. This phenomenon, of course, can be disastrous to some of the smaller firms.

Although there exists a definite need for skilled tradesmen, appren-

ticeship training as described in Chapter II involves various costs to the contractor. There is no guarantee that the apprentice will continue to work for the contractor upon completion of training. Trained men can command higher wages working in the union sector, or working for higher paying non-union firms. Small contractors are afraid to accept this risk and the attendant costs of training. "I'll take all the men you care to train." is a commonly expressed sentiment of small contractors.

Formal training of any kind is much less common in the non-union sector than in the union sector of construction. A recent study of non-union construction by Northrup and Foster which concentrated on larger non-union firms, where training is more common than the smaller non-union firms, revealed that,

Although more than 80% of the union contractors reported that they were participating in some local training program, only 42% of the open shop contractors claimed that any of their workers were enrolled in such a program. 2

Other data revealed that the actual proportion of non-union firms was considerably less than 40%. In Philadelphia the Northrup data showed only 5% to 10% of non-union firms participated in formal training and in Baltimore only 15%.3

Larger non-union firms engaged in commercial as well as residential construction conduct the bulk of formal training in the non-union sector. Giants in the non-union field, such as Brown and Root of Houston, Texas, and Daniel International Corporation of Greenville, South Carolina, conduct sophisticated training using modular techniques. Men acquire various skills that are required on a certain job by taking evening instruction in a specific skill area, rather than learning an entire trade through

a formal apprenticeship program.

Traditional apprenticeship programs are conducted by some independent, non-union, firms who register their programs individually with the BAT or a SAC. Other non-union, traditional apprenticeship programs are sponsored by contractor associations such as the Associated General Contractors (AGC), for their non-union members, the Associated Builders and Contractors (ABC), the National Association of Home Builders (NAHB), and the Associated Independent Electrical Contractors of America (AIECA). For greater detail on these programs and non-union construction in general, the reader is referred to the work by Northrup and Foster, Open Shop Construction (footnote No. 2) and Foster's, Manpower in Homebuilding (footnote No. 1).

III.2. OBSTACLES TO NON-UNION APPRENTICESHIP

Advantages of a registered apprentice program were detailed in Chapter II, Section 2. Desirable as a registered program is, there existed in the recent past far more formidable obstacles to non-union participation in the NAP than the expense of the programs. Unfortunately for non-union contractors the BAT and SAC's which administer and register apprenticeship programs are composed largely of former union members. The SAC of one of the two states studied in Chapter IV was composed of three business agents and one former business agent. The director of the BAT, Hugh C. Murphy, is the brother of the President of the Bricklayers, Masons and Plasterers International Union of America, Thomas F. Murphy. As most apprenticeship programs in the past have been associated with trade unions, it is only natural that BAT personnel

should be drawn from the ranks of unions, whose members are well acquainted with the apprenticeship system.

The law surrounding apprenticeship is regulatory law--rules made by the personnel of the BAT--and in many cases these rules work against non-union contractors. The programs are controlled by an administrative branch of the government. This branch has the legal right to make regulations, as well as the right to decide when and if a program meets the regulations and is eligible for registration. The programs are voluntary and contractors therefore have no access to the courts for review of BAT decisions. An example of this occurred in a 1967 suit in the U.S. District Court of Columbia, South Carolina. The suit was brought against the Labor Department by four non-union electrical contractors to force the Department to approve their apprenticeship training programs, which they needed in order to pay apprentice wages under the Davis-Bacon Act. Judge Charles E. Simmons, Jr. concluded that the companies could show no legal wrong, stating:

Given an alternative, I might hold otherwise since the defendant through its Bureau of Apprenticeship and Training has refused to approve and register plaintiffs' separate apprenticeship program, which will have the practical effect of either requiring the non-union employers to participate in a program controlled by the unions, or be denied an equal basis to bid on government contracts. Nevertheless, as I view the law as above analyzed, I have no such alternative, for Congress has given such authority to act to the Secretary, and plaintiffs' remedy is legislative not judicial.

The policy of the Labor Department's Bureau of Apprenticeship and Training is to encourage establishment of one apprenticeship program in a trade in each area, jointly sponsored by labor and management. Columbia, S.C., has a registered apprenticeship training program in the electrical trade sponsored by a Joint Labor Management Council.

The four companies, Gregory Electric Co., Inc., Carolina Electric Co., Inc., Cashion Electronics, Inc., and Seastrunk Electric Company, were invited to join the existing programs but declined. The Bureau had issued a circular on April 29, 1963, authorizing its agents to aid non-union groups in establishing their own programs if they did not wish to join established ones. Why BAT declined to give help in this case is not stated.⁴

Until 1970 BAT guidelines to their field offices were governed by Circular 66-67, Code 440 dated March 9, 1966. This circular severely limited the opportunity for non-union contractors to register apprentice programs. If there was an existing joint program in the area the non-union applicant would have to participate in it, sending his apprentices to classes with union apprentices. If no joint program existed, or if the joint program refused to allow the non-union firm to participate, then the firm could use the recommended national standards and establish its own program. There was also a provision for review by the BAT's regional director, of an applicant's request for a separate program if the applicant refused to participate in the established program.⁵ In 1970 these rules, which did not favor an explosion of non-union participation in the NAP, were superceded by circular 70-26 (Appendix D) which stated in part,

Bureau responsibility under the National Apprenticeship Act is to provide service and assistance to all industry in the establishment of apprentice programs.⁶

The circular went on to say that if the potential sponsor did not wish to participate in an existing program, the BAT would assist him in establishing his own registered program.⁷

Since the adoption of 70-26 the administrative climate for non-union apprenticeship has improved considerably. By the end of 1974

non-union apprentices comprised 14% of all apprentices registered in construction trades.

III.3. SIMILARITY OF UNION AND NON-UNION PROGRAMS

One frequently encounters comments in apprenticeship literature on the similarity of union and non-union programs. An article by Franklin in a recent issue of Labor Law Journal (Feb 1976, p. 103) is an illustration of this. Franklin lists three reasons for the similarity of union and non-union programs.

1. When non-union programs started union programs were the only example of apprenticeship programs.
2. BAT officials have union backgrounds and only approve programs modeled after union programs.
3. Despite BAT restrictions non-union associations recognize the desirability and necessity of imparting a broad range of skills to each apprentice and use BAT formats.

Similarities are the result of two BAT policies. The first policy is that all registered programs must meet the minimum standards for training and administration as specified by the Federal Apprenticeship Committee (see II.2.) and the equal employment provisions of 29 CFR 30. The second policy enforced by the BAT is their narrow definition of an apprenticeable occupation (see II.2.). Thus, the similarities (144 hours of related training, equal employment opportunity/affirmative action pledge, etc.) result from the requirement that all programs meet one set of minimum standards in order to qualify for registration in the NAP.

Though the structure and terminology of a non-union program resembles

a union program, the non-union programs are not exact replicas. Differences in content can be found by closely reading any booklet of union training standards for a specific trade and comparing it with a booklet of non-union training standards for the same trade. Looking at union carpenter work processes and ABC (a non-union association) carpenter work processes, one notices that both require 8000 total hours of OJT. The similarities however, end there. For instance, the ABC work processes list 500 hours for stair building, while the union work processes only mention "stair work" as one of 10 subtopics of inside finishing calling for 1500 hours of OJT. The union program lists topics to be included in related training, the ABC standards merely specify 144 hours of related training a year.

When comparing ABC and union bricklayer standards one notices that the union program calls for 4500 total hours of OJT while the ABC program calls for 6000 hours. As with the carpenter program the work processes are laid out differently with different emphasis on each of the skills associated with the trade. The union program lists a detailed related training curriculum, while ABC only calls for 144 hours of related training. Similar differences can be seen when comparing union plumbers and pipefitters to the non-union plumbing program. There is a considerable amount of freedom for the program sponsor concerning the actual training a man is to receive on the job and in the classroom, in a given trade. Only the total number of hours is rigidly specified.

Similarity of job classifications result from the BAT's practice of jealously maintaining the right to determine what is and what is not an apprenticeable trade. Thus, a man working for a non-union general

contractor might be a "carpenter apprentice" when he actually does carpentry work on the job only 30% of the time. The non-union firms desire more freedom to determine what is and what is not a trade. The non-union general contractor's utilization of his work force is oriented to a type of construction in many cases, rather than to a single trade. Instead of just building the forms for a slab, a non-union "carpenter" often places the steel reinforcement, pours the concrete and finishes it. For this reason, non-union general contractors have sought changes in apprenticeable trades. Examples of different occupational classifications for future non-union programs might be: "concrete mechanic"; "steel frame building mechanic", "swimming pool mechanic" and "air-conditioning mechanic". Non-union subcontractors dealing with specialty trades such as sheet metal workers, plumbers and electricians are generally content with the traditional trade classifications. .

III.4. STATISTICS

The statistics for non-union and union apprenticeship appear in tables III.1 through III.4. The statistics for each trade are for construction apprentices only. Industrial electrician apprentices for instance, are not included in the statistics. The statistics include construction apprentices registered under the following, U.S. Department of Labor Standard Industrial Classification (SIC) Codes:

- 15 Building construction--general contractors and operative builders
- 16 Construction other than building construction--general contractors

17 Construction--special trade contractors

86 Services--Membership organizations (included because some state BAT representatives report JAC construction trade programs under this SIC).

The data are presented in four tables:

III.1. Union Construction Apprenticeship by Trade--United States Totals for 1974

III.2. Non-Union Construction Apprenticeship by Trade--United States Totals for 1974

III.3. Union Construction Apprenticeship by Trade--Industrial New England State Totals for 1974

III.4. Non-Union Construction Apprenticeship by Trade--Industrial New England State Totals for 1974

The tables present a detailed profile of apprenticeship in 1974 for each of the 21 trades recognized by the Department of Labor as construction trades. The year 1974 was chosen as it is the latest year for which complete data is available. Detailed comparisons of union and non-union trades may be made using the tables. Comparison of the New England industrial state trade programs with national programs is also readily done.

The data show that non-union construction apprentices represent 14% of all nationally registered construction apprentices. In the industrial New England state however they represent 25% of all registered construction apprentices. The industrial state studied has no apprentices in the following, nationally recognized apprenticeable occupations:

--Floor Coverers

--Linemen, Light and Power

--Operating Engineers

--Ornamental Ironworkers

--Tapers, Dry Wall Installers

The data also show that minority participation in construction apprenticeship is far more extensive in the union sector than in the non-union sector of the construction industry. On a national basis only one non-union trade (Painters, 27%, end of 1974) has a greater percentage of minority apprentices than a union trade (Union Painters, 23% end of 1974). A comparison of minority integration into apprentice programs in the industrial New England state studies shows that non-union carpenters (12%) are more integrated than union carpenters (11%). This trade is often considered less skilled than some of the mechanical trades. The following data show that minority apprenticeship participation (percentages given) in trades considered to require greater skill is much lower in non-union programs than in union programs on both a national and state basis.

	<u>National Programs</u>		<u>Industrial New England State Programs</u>	
	<u>Union</u>	<u>Non-Union</u>	<u>Union</u>	<u>Non-Union</u>
Electricians	15%	7%	11%	1%
Plumbers	16%	5%	21%	3%
Sheet Metal Workers	16%	7%	22%	3%

The non-union mechanical trades are more segregated than other non-union trades much as the union sector mechanical trades were at one time. Extensive government affirmative action enforcement finally resulted in integration of the union mechanical trades. The reason for the segregation of non-union mechanical trades is a possible topic for further research.

Abbreviations Used on Tables III.1.--III.4.

BOP - Number of apprentices registered at the beginning of the period.

ADD - Number of apprentices added during the period.

CAN - Number of apprentices cancelled during the period.

COM - Number of apprentices completing apprenticeship during the period.

EOP - Number of apprentices registered at the end of the period.

TABLE III.1.*

UNION CONSTRUCTION APPRENTICESHIP BY TRADE--UNITED STATES TOTALS FOR 1974

	<u>BOP</u>	<u>ADD</u>	<u>CAN</u>	<u>COM</u>	<u>EOP</u>
Bricklayers, Stone and Tile Setters	6700/21**	2122/23	1133/29	973/13	6716/22
Carpenters	32186/16	11503/18	9011/18	4100/13	31028/16
Cement Masons	2779/43	1392/46	756/45	475/41	2940/44
Electricians	20380/13	6180/17	1842/22	4286/8	20932/15
Floor Coverers	1023/20	722/20	429/26	204/16	1112/17
Glaziers	1064/25	471/26	136/23	221/23	1178/26
Insulation Workers	1341/16	479/23	126/39	238/13	1261/19
Lathers	1098/22	408/25	190/17	179/16	1137/25
Linemen, Light and Power	2118/8	831/7	531/7	425/4	2093/8
Operating Engineers	4293/26	1872/32	644/36	660/21	4860/27
Ornamental Ironworkers	403/23	38/5	26/15	75/25	340/21
Painters	5424/23	2673/24	1505/26	818/20	5774/23
Pipefitters	7675/11	2513/17	515/17	1601/9	8072/13
Plumbers	13310/14	3331/18	1356/19	2490/10	12795/16
Pipefitters--Steamfitters	914/23	158/44	37/38	156/8	879/28
Plasterers	956/33	504/36	237/40	135/26	1088/33
Roofers	2934/33	1884/36	1076/36	338/22	3404/35
Sheet Metal Workers	8648/15	2630/18	886/24	1930/10	8462/16
Sprinkler Fitters	2910/4	655/14	320/7	344/2	2901/6
Structural Steel Workers	6752/18	3913/24	972/29	1263/14	8430/20
Tapers, Dry Wall Installers	1277/16	573/19	579/21	285/14	986/16

* Information supplied by the U.S. Department of Labor

** The figures preceding the slash (/) are the total number of apprentices. The figures following the slash (/) are the percentage of the total who are minorities.

TABLE III.2.*

NON-UNION CONSTRUCTION APPRENTICESHIP BY TRADE--UNITED STATES TOTALS FOR 1974

	<u>BOP</u>	<u>ADD</u>	<u>CAN</u>	<u>COM</u>	<u>EOP</u>
Bricklayers, Stone and Tile Setters	887/13**	296/13	194/15	76/3	913/14
Carpenters	3727/10	2041/8	1292/10	255/5	4221/9
Cement Masons	85/29	36/53	9/55	1/0	111/35
Electricians	6568/7	3218/8	2205/9	584/6	6997/7
Floor Coverers	114/3	25/0	31/3	2/0	106/3
Glaziers	131/11	71/7	35/3	16/19	151/10
Insulation Workers	117/16	112/12	80/21	4/0	145/11
Lathers	72/10	48/6	27/18	7/29	86/3
Linemen, Light and Power	248/7	37/5	82/13	26/4	177/4
Operating Engineers	162/12	34/12	39/18	5/0	152/10
Ornamental Ironworkers	24/12	13/0	0/0	7/0	30/10
Painters	183/22	85/29	35/9	15/20	220/27
53 Pipefitters	797/9	284/10	146/11	66/1	869/10
Plumbers	4095/6	1765/5	1159/8	307/4	4394/5
Pipefitters--Steamfitters	10/10	28/0	1/0	13/0	24/4
Plasterers	33/24	14/21	7/0	6/0	54/20
Roofers	107/21	102/11	46/13	8/12	155/17
Sheet Metal Workers	1351/7	613/9	337/10	124/9	1503/7
Sprinkler Fitters	157/1	58/2	7/0	15/0	193/1
Structural Steel Workers	66/12	50/30	14/43	2/0	100/17
Tapers, Dry Wall Installers	75/13	27/7	5/0	2/0	95/13

* Information supplied by the U.S. Department of Labor

** The figures preceding the slash (/) are the total number of apprentices. The figures following the slash (/) are the percentage of the total who are minorities.

TABLE III.3.*

UNION CONSTRUCTION APPRENTICESHIP BY TRADE-INDUSTRIAL NEW ENGLAND STATE TOTALS FOR 1974

	<u>BOP</u>	<u>ADD</u>	<u>CAN</u>	<u>COM</u>	<u>EOP</u>
Bricklayers, Stone and Tile Setters	278/13**	73/34	15/0	67/4	269/15
Carpenters	538/8	137/14	68/6	120/7	487/11
Cement Masons	38/13	0/0	0/0	2/0	36/0
Electricians	642/10	92/14	25/24	156/8	553/11
Floor Coverers	0/0	0/0	0/0	0/0	0/0
Glaziers	46/28	0/0	7/57	19/32	20/15
Insulation Workers	85/7	21/14	5/40	29/7	72/7
Lathers	18/0	2/0	0/0	3/0	17/0
Linemen, Light and Power	0/0	0/0	0/0	0/0	0/0
Operating Engineers	0/0	0/0	0/0	0/0	0/0
Ornamental Ironworkers	0/0	0/0	0/0	0/0	0/0
Painters	109/21	9/22	25/28	6/0	87/21
Pipefitters	283/9	59/20	15/7	103/4	224/14
Plumbers	315/18	71/24	11/45	78/6	297/21
Pipefitters--Steamfitters	0/0	0/0	0/0	0/0	0/0
Plasterers	1/0	1/0	0/0	0/0	2/0
Roofers	56/20	25/28	6/17	15/27	60/22
Sheet Metal Workers	231/13	66/21	29/0	88/4	180/22
Sprinkler Fitters	23/4	7/14	0/0	16/0	14/14
Structural Steel Workers	206/5	79/6	11/9	76/5	198/5
Tapers, Dry Wall Installers	0/0	0/0	0/0	0/0	0/0

* Information supplied by the U.S. Department of Labor

** The figures preceding the slash (/) are the total number of apprentices. The figures following the slash (/) are the percentage of the total who are minorities.

TABLE III.4.*

NON-UNION CONSTRUCTION APPRENTICESHIP BY TRADE-INDUSTRIAL NEW ENGLAND STATE TOTALS FOR 1974

	<u>BOP</u>	<u>ADD</u>	<u>CAN</u>	<u>COM</u>	<u>EOP</u>
Bricklayers, Stone and Tile Setters	19/10**	4/0	5/0	2/0	16/12
Carpenters	118/8	43/19	38/8	10/0	113/12
Cement Masons	4/0	1/0	0/0	1/0	4/0
Electricians	370/1	134/3	124/3	48/0	332/1
Floor Coverers	0/0	0/0	9/0	0/0	0/0
Glaziers	5/20	3/0	2/0	1/0	5/20
Insulation Workers	0/0	0/0	0/0	0/0	0/0
Lathers	5/0	0/0	1/0	1/0	3/0
Linemen, Light and Power	0/0	0/0	0/0	0/0	0/0
Operating Engineers	0/0	0/0	0/0	0/0	0/0
Ornamental Ironworkers	0/0	0/0	0/0	0/0	0/0
Painters	5/20	1/0	1/0	2/0	3/33
Pipefitters	36/3	14/7	9/0	3/33	38/3
Plumbers	338/3	91/1	94/1	30/3	305/3
Pipefitters--Steamfitters	0/0	1/0	0/0	0/0	1/0
Plasterers	7/14	0/0	2/0	0/0	5/20
Roofers	2/50	1/0	0/0	0/0	3/33
Sheet Metal Workers	25/8	21/14	8/12	2/0	37/11
Sprinkler Fitters	1/0	2/0	0/0	0/0	3/0
Structural Steel Workers	1/0	0/0	0/0	0/0	1/0
Tapers, Dry Wall Installers	0/0	0/0	0/0	0/0	0/0

* Information supplied by the U.S. Department of Labor

** The figures preceding the slash (/) are the total number of apprentices. The figures following the slash (/) are the percentage of the total who are minorities.

III.5. CHAPTER III FOOTNOTES

1. Howard G. Foster, Manpower in Homebuilding: A Preliminary Analysis, (Philadelphia, 1974), p. 78.
2. Herbert R. Northrup and Howard G. Foster, Open Shop Construction, (Philadelphia, 1974), p. 264.
3. *Ibid.*
4. Daily Labor Report (DLR), 9 June 1967, No. 112, pp. A-7, A-8.
5. DLR, 29 July, 1970, No. 146, p. A-5.
6. *Ibid*, p. A-6.
7. *Ibid*, p. A-6.

IV. SIX CASE STUDIES OF NON-UNION APPRENTICESHIP PROGRAMS IN TWO NEW ENGLAND STATES

In order to explore non-union apprenticeship programs in some depth, six case studies of ongoing programs in two New England states were undertaken.

The first section of this chapter outlines the objectives of the case studies, the specific aspects of apprenticeship which were investigated and the methodology used. The second and third sections of this chapter contain the case studies. Section two consists of a background description of the political climate and general problems facing apprentice programs in the rural New England state. This is followed by case studies of three non-union apprentice programs in that state. Section three contains a similar introduction to the industrial state, and three case studies of programs located there. Conclusions are presented in the following chapter.

IV.1. METHODOLOGY

Union programs and their attendant federal and state bureaucracies have been established for forty years. The newer non-union programs were obliged to conform to union oriented standards and practices in order to be registered by SAC's and the BAT. As non-union construction practice differs markedly from union practice, and union methods and terminology are anathema to open shop contractors, the question arises: "Why did the non-union firms subject themselves to union training practices, and how have those practices been integrated into their non-union operations?" The analysis of non-union programs focused on these general and the

following specific areas.

- Why do non-union firms conduct apprenticeship training?
- In what way is the non-union work force utilized differently than union workers?
- How are non-union work practices reflected in related training (night school) programs?
- How are non-union work practices reflected in on-the-job training?
- Non-union apprentice perceptions of the programs.
- Funding of apprentice training.
- Recruiting of apprentices.
- Minority participation in non-union apprentice programs.
- Changes desired by non-union contractors.
- How differences in locale and trade affect each of the above.

Time limitations prohibited any attempt for statistical analysis of the specific areas listed. The analysis is based on qualitative insight gained by studying the apprentice programs of six non-union contractors, representing various construction crafts. All of the contractors belong to the New England branch of a national contractors association. The Association has apprenticeship committees in the various New England states. Apprentices are indentured to the state committees much as a union apprentice is indentured to a JAC, however the committee indentures apprentices of many trades, while each JAC represents only one trade. The apprenticeship standards of each state committee are approved by the appropriate SAC, or the BAT where there is no SAC. Apprentices indentured to the committees are likewise registered with the applicable SAC, or BAT where appropriate.

Programs were studied in two New England states, one considered an urban industrial state, the other a rural state. In the rural state three contractors in the town of "Free Enterprise" were studied:

BCD Corporation - general contractor, carpenter apprentices (see IV.2.2.).

EFG Company Inc. - general contractor, carpenter apprentices (see IV.2.3.).

QRS Electric Co. - electrical contractor, electrician apprentices (see IV.2.4.).

In the industrial state three contractors near the city of "Metropolis" were studied:

Lightning Electric Co. Inc. - electrical contractors, electricians (see IV.3.2.).

Climate Control Inc. - HVAC contractors, sheet metal apprentices (see IV.3.3.).

Flannery & Magee - carpentry contractor, carpenter apprentices (see IV.3.4.).

The analysis is based on case studies of these six companies, developed by interviewing a company manager, apprentice, journeyman or foreman participating in OJT, and the apprentice's related training instructor. The checklists used in conducting these interviews are included in Appendices E through H. In addition to company personnel and related training instructors, interviews were conducted with BAT and SAC personnel in each state as well as Contractor Association staff, Apprentice Committee members and member contractors. To protect the confidential nature of some of the interviews the names of states, cities, people, associations and companies have been omitted or changed.

IV.2. THE RURAL STATE

IV.2.1. Background

When the National Contractor Association established a New England branch in 1968, only one firm from the rural state was a member. A brief organizing campaign by the IBEW in Free Enterprise ended soon after the electrical contractors there joined the Association in 1969. Association membership boomed in Free Enterprise. The construction trade union movement, which had been characterized by small locals in various towns in the state, then consolidated around the state capital and the one industrial city. The small locals consolidated into single, statewide locals. The smaller cities such as Free Enterprise were left with virtually no union construction tradesmen.

The non-union construction firms in Free Enterprise were doing quite well financially. However, as they expanded their operations it became apparent that more skilled craftsmen would be needed. Following the lead of other Association branches, the New England branch of the Contractors Association was trying to meet that need with an Association Apprenticeship program, to be registered in the various New England states. The plan was to establish a model program in the isolated Free Enterprise area and use it as an example to promote apprenticeship among New England Association members. When formal application was made in 1969 to the SAC, chaired by the state Commissioner of Labor who was an ex-carpenter business agent, and composed of three other union business agents, the Association program was disapproved. Following the meeting the IBEW business agent/SAC member followed the Contractor Association's Executive

Director to his car and informed him that the program would be approved over the business agent's dead body. The Association Director abandoned his plan to make Free Enterprise the model of Association Apprenticeship. The eighteen Association members of Free Enterprise however, did not give up. Realizing the futility of applying to the present SAC for approval, they determined that the membership of the SAC must be expanded to include management personnel. Several of the contractors had taken an active role in the 1969 gubernatorial campaign. Fortunately for them, their man had won; unfortunately for them, he was loath to upset organized labor. By the summer of 1971 the contractors had not convinced the governor to expand the SAC. The contractors set up a program of their own, assessing each contractor \$500 per apprentice. They recruited evening school instructors and used curriculums provided by their National Association. The governor, whose term was to end December 31, 1971, expanded the SAC in the fall of 1971, to include three labor representatives, three management representatives and one representative of the general public. The Association's program was approved in March of 1972.

The old SAC had not disapproved all non-union proposed programs. Several individual non-union contractors in the area around the capital had approved apprenticeship programs. The apprentices from these programs attended related training in state sponsored classes with union apprentices. When the Contractor Association tried to establish a program among these contractors they met with little success. Unlike the Free Enterprise group of contractors, those near the capital already had programs and feared that a new association program might flounder, and disrupt their apprentices. They also suspected that it would cost too much

money.

After Free Enterprise's program was approved the state paid the cost of teachers' salaries and the apprentices were eligible for veteran's benefits. The cost to the individual contractors in subsequent years has been only \$50 per apprentice per year. Currently this program is training bricklayer, carpenter, cement mason, electrician and plumber/steamfitting apprentices. Standards have also been approved for painter, plasterer, refrigeration and air conditioning pipe fitters, and sheet metal apprentice programs. The apprentices are indentured to the Association's rural state Apprenticeship Committee composed of two members of each trade covered by the standards. Half of the members represent management and are appointed by the Director of the Association, the other half of the Committee members are journeyman (non-supervisors) who are elected by Association journeymen in an election supervised by the SAC. Each May the Committee advertises available apprentice positions. The state employment office administers aptitude tests to interested applicants. Those applicants who pass the minimum requirements of the employment officer are screened by the Apprenticeship Committee. Each applicant is ranked in a pool based on points awarded for the following factors:

Aptitude test results:	25 points
Educational background:	15 points
Interview:	25 points
References and conduct record:	10 points
Previous working experience:	25 points

(Maximum points for each factor are listed.) Selection of apprentices is in descending order of ranking.

Because the rural state has an SAC, all apprentices are registered with the state. However, the rural state has no staff to promote

apprenticeship, place apprentices or check programs for compliance. All of these duties are handled by one BAT man who is the state BAT director as well as the state's only field man. He also plays an active role advising the SAC and carrying out their directives.

The rural state's maximum apprentice to journeyman ratio has been set by the SAC at 1:5.

IV.2.2. BCD Corporation

"Free Enterprise" is a town of about 250,000 located in the southern tier of a rural New England state. The BCD Corporation is a general contracting firm with offices in Free Enterprise. Most of BCD's work is done in and around the town, but some work is done throughout the southern tier. BCD does mostly commercial and light industrial building. Their specialty is a light steel framed and clad building used as an office and warehouse by small firms. Mr. BCD began the business 23 years ago with a small crew of general construction mechanics. Initially BCD did residential work and Mr. BCD worked with the tools of the trade. The business has grown gradually since then. Like many firms in Free Enterprise, BCD is basically a family operation. Mr. BCD is President, his son-in-law is Vice President.

The average size of a BCD job is \$300,000, but they have undertaken contracts of \$1 million. The firm's sales volume was \$1.2 million in 1975. BCD does not do many prevailing rate (Davis-Bacon) jobs; the last one they did was in 1975 and was a small (\$44,000) crash facility for the FAA at the Free Enterprise Airport. The labor rates for that job were imported from the city of Metropolis, 100 miles away, across a state line.

BCD does most of the work on their projects with their own personnel, consisting of carpenters and laborers. The carpenters could, for all intents and purposes, be called general construction mechanics. The main difference between them and the laborers is that the "carpenters" are paid a higher rate. BCD occasionally hires masons for laying concrete block, but only when there is a significant amount of block or brickwork. Otherwise the block work is done by one of the carpenters who has picked up that skill. The value of a carpenter to the firm depends on his efficiency and the number of skills he has in addition to those of the traditional carpenter. Carpenters at BCD do the following: build forms for footings; place rebar and concrete; operate power trowels and finish concrete slabs; erect steel buildings, including bolting and welding; place insulation; do roofing work; and place concrete block. Not all of the carpenters can do all of those jobs, but BCD has a good mix of men with the various skills who can do or direct the work. BCD even does electrical installation on small one-man jobs. The General Superintendent had worked as an electrician's apprentice at one point in his career and he does the electrical work.

BCD has weathered the recession fairly well while other general contractors in Free Enterprise have gone out of business or have reduced their operations substantially. To keep their overhead costs low BCD lays off their crew readily when there is no work. It is a tightly run and low paying organization. Several men in Free Enterprise remarked that BCD pays the lowest construction wages around and that 80-90% of the people who work there would leave if they could. The average number of workers employed by BCD is 25, although this has doubled during summer

months and dropped to as low as 4 at one point in the recession.

No one has ever tried to organize BCD in the 23-year life of the firm. The only union construction workers are the masons who belong to a local with offices near the state capital 50 miles away. The masons in Free Enterprise work for the non-union rate when they do work for BCD. The Vice President of BCD remarked that organizing campaigns generally fail in Free Enterprise due to the scarcity of work and independent nature of the workers. BCD has never been harrassed in any way by a union.

During the late 1960's BCD was expanding and taking on bigger jobs. BCD's management noted that their source of labor was the town of Free Enterprise where no one had any formal training in construction. The trade was always learned on the job or in the services. A man became a "carpenter" when Mr. BCD was convinced he was old enough to have seen everything a "carpenter" needed to know. Young men were not carpenters because they did not know enough. Young men always started out as laborers and worked as such until they could convince the management that they had picked up enough skills to be paid otherwise. Mr. BCD, along with several other contractors in town, realized that there might be a better way to develop skilled workers. In September 1970 they set up an apprentice program through their National Contractors Association. The original cost was \$500 per year per apprentice. After the state approved the program this cost fell to \$50 per year per apprentice. At first BCD required the apprentice to pay the fees, promising him reimbursement upon completion. That policy has been dropped. Now BCD pays the cost directly. BCD has enrolled six apprentices during the program's five year history.

Apprentices working for BCD were indentured only after they had been

on the BCD payroll for some time. None of them came from the Contractor Association's pool, took the Association test or had a formal oral interview. They approached or were approached by BCD management on an individual basis and signed up for the program in this informal manner. One apprentice said he had taken an aptitude test at the state Employment Office and another said he had taken a test to validate the first year of evening training, he was not given credit for "on-the-job" training (OJT) hourly requirements however, and has to work the usual 8,000 hours on the job to complete the program.

To a man, the apprentices stated that the reason they had become indentured was to avoid being classed as a laborer all their lives. The men being paid carpenter's wages were old; it had taken years for them to learn the trade and to be recognized as carpenters. The apprentices felt that unless they had the certificate from the Contractor Association stating that they had completed a carpenter's apprenticeship they would be hired and paid as laborers for years. With the scarcity of jobs in Free Enterprise, their only bargaining power was completion of apprenticeship training.

The Vice President of BCD said that his purpose in indenturing workers was to bring up the skill level of the firm's journeymen. He was not actively looking for foremen in the program but suspected that in a group of six people willing to go to school at night there would be some with the ambition and leadership to fill those jobs in the firm.

On-the-job training for apprentices is informal. There is no set plan to teach a man a given work process at any particular time. BCD is not in the business of training carpenters. The apprentices do the work

assigned to them by the foremen and some of that work happens to be listed as a work process on the Contractor Association Carpenter Standards. The rest of the work is across traditional trade boundaries and though there is no formal requirement for the apprentices to learn anything but carpenter skills it is important for reasons of job security for them to learn all that they can. As the General Superintendent said, "For our work it is just as important to use a power trowel as it is to build stairs." The Vice President said that he made an effort to get the apprentices on the wood framed jobs, but that there were not that many of them. He felt that no formal rotation system was needed as the night training, combined with their assignment to the various BCD contracts over a four year period would provide the opportunity to develop all the skills required by the apprentice standards.

It is up to the apprentices to "learn" how to do something. Sometimes they are assigned to a knowledgeable man who enjoys expounding on the intricacies of the trade, but this is the exception. Most of the time they have to watch carefully and ask specific questions when they do not understand. The advantage they have over men designated as laborers is that they are assigned to the higher skilled jobs.

For purposes of the Contractor Association Apprenticeship Completion Certificate and the regular pay increases it is the number of hours of OJT that is important, not the calendar time on the job. To complete the program a man must have 8,000 actual hours working on the job, not a calendar span of four years. The apprentices complete time cards weekly which summarize the number of hours they have worked at each work process. These cards are checked by the Job Superintendent and sent to the BCD office where the hours are compiled on a monthly basis and sent to the

Contractor Association. The Association maintains a file on each apprentice and his total hours on each work process. Unfortunately that information is not used by the contractor to rotate men to jobs where they might make up hours on a work process in which they have had insufficient experience.

The Contractor Association State Apprentice Committee has complete control of the related training (night school) program in Free Enterprise. Teachers and curricula are chosen by the Committee. Teachers' salaries are paid by the State Department of Education when there are more than ten students per class; if there are less than ten, the Association pays the salaries.

Classes are held two nights a week in the Free Enterprise High School wood shop. First and second year carpenter apprentices make up one class, third and fourth year apprentices another. Only apprentices indentured to association contractors attend classes.

Most of BCD's apprentices were in the third and fourth year class. Their instructor is the high school wood shop teacher. He has extensive experience as a cabinetmaker and has worked eight summers as a journeyman carpenter for general contractors. His outline for the two hour class period is a short lecture on the evening's topic followed by a period of examples and a period of practical work. For the stair building class he discussed the basic types of stairs and the calculations necessary to build each. The lecture was followed by several sample calculations and the actual construction of a set of stairs by each student. Time is set aside during each class for discussion of problems encountered on the job.

Topics studied included: math, blueprint reading, layout, material

estimating, stair building, framing, and rafter cutting. The original curriculum came from the National Apprentice Committee of the Contractor Association. It was slanted towards residential carpentry. All of the carpenter apprentices were working for commercial contractors and felt that commercial work was not covered in sufficient detail. The instructor found a more suitable text and curriculum and urged the Association Apprentice Committee to approve it, which they did. Information on steel construction and form building is now included in the course. The program is quite responsive to the needs of the users in this way.

Program emphasis is on learning the material through class attendance. Homework and tests play no significant role. A student is allowed three unexcused absences. Additional absences subject him to expulsion by the Committee. BCD's Vice President requires class attendance even if the apprentice has been laid off. Such attendance is a mandatory condition of rehire.

Conditions and regulations concerning apprenticeship are understood imperfectly by the BCD apprentices. None of them has a copy of their indenture agreement. The apprentices start out at 60% of the \$5 an hour journeyman base rate. They receive an increase of 5% of that rate for each additional 1,000 hours of OJT completed, which is the minimum pay prescribed by the State Apprentice Standards. The BCD apprentices did not receive their last pay increase because management told them it could not afford to give it to them. One apprentice was told that the base rate had been lowered from \$5 per hour to \$4.75 and that his present salary was therefore greater than the required minimum percentage increase he was due.

One apprentice, who found he was earning less than a man who had joined the company when he had, and who was not in the apprentice program, was told by management that they had to pay him that wage as it was prescribed by law. In fact, that prescribed wage is only a minimum.

All of the apprentices had been laid off for periods ranging from two to twelve weeks. There is no dropout problem however, as work in Free Enterprise has been difficult to find during the recession.

Because of the fluctuation of the work force BCD is at times (such as the present) in violation of the state's one to five (apprentice to journeymen) ratio, but it is unlikely the violation will ever be discovered. Only the number of apprentices are registered with the state, not the number of journeymen. An audit of pay records by the state BAT fieldman would be necessary to uncover the discrepancy and there is only one fieldman for the entire state. Most violations are discovered on prevailing rate jobs where the ratio is checked, but BCD does little prevailing rate work. Even if the violation was discovered the state might be reluctant to require BCD to lay off apprentices because they are temporarily violating the ratio. Enforcement of the ratio poses many such practical problems.

It is often said that completion of an apprenticeship program makes a man a likely candidate for a supervisory position. The fourth year apprentice, who is receiving less money than his nonapprentice coworker who started with him, is already a foreman and has served as field superintendent during the construction of a steel building. He supervised nine men on that job while receiving apprentice wages. Upon completion of apprenticeship he feels he may be in an excellent position to

negotiate a raise.

The effect of the apprentice program on the construction workers of Free Enterprise was noted succinctly by an evening school instructor:

This is a town of small, family owned businesses where money and jobs are tight. If it wasn't for the apprentice program these guys would be working as laborers with little bargaining power and a slim chance of getting raises. With this program they are guaranteed raises and steady advancement towards the journeyman rate.

IV.2.3. EFG Company Inc.

EFG Company Inc. is the largest general contractor in Free Enterprise. The firm specializes in designing and building institutional, commercial and industrial buildings. The percentage of their work which is prevailing rate varies considerably but might be 20% for an average year. An \$8 million hospital (prevailing rate, 1971) was the largest project the firm has completed. Average yearly sales are \$5 million. Like BCD, EFG does most of their work in and around Free Enterprise, and the southern tier of their own and the adjacent rural New England state. When men are forced to commute to distant sites, EFG rents a bus and takes them to and from the job. This practice differs markedly from that of other Free Enterprise firms who provide no transportation or travel pay for their commuting work forces. The firm is characterized by Free Enterprise construction workers as being "the biggest and best paying construction firm in town." A young EFG journeyman remarked that he had not been on a prevailing rate job where the prevailing wage exceeded his normal wages.

Mr. EFG started the company in 1942. He remained in control of the firm until 1964 when ill health forced him to sell it to two of his employees. These men are 50% owners, with one serving as Treasurer,

responsible for design, estimating, bidding and contracting. The other is President and takes responsibility for construction, assuming control of a project after it has been contracted.

Like BCD, EFG does much of their own work, subcontracting mainly the mechanical and electrical portions of the contract. They employ masons, laborers and carpenters, however these trade lines are often blurred. All of the journeymen carpenters are really general construction workers who have to be able to do everything, much the same as the BCD carpenters. They also carry their own material, do their own shoveling, cleanup, etc. Each man negotiates his salary with the EFG management. One man has made an arrangement where he gets \$7 an hour when he works as a mason and \$5 an hour when he works as a laborer.

The EFG work force varies throughout the year from a group of as low as 15 men to 150 men during summers. Presently EFG has 44 men in the field with 16 on temporary layoff.

EFG, along with several other general and mechanical contractors, saw the need for a formal training program in the late 1960's and early 1970's. Many of the construction workers lacked basic mathematical skills such as multiplying fractions, converting decimals to fractions and reading a ruler. The masons were the only construction union in town at that time and they had no formal training program. The EFG program through the Contractor Association is the same program in which BCD participates. The value of the plan for EFG was the night schooling the men would get. The Vice President of Engineering said prevailing wage work played no part in the decision to begin apprenticeship. The program was offered to *all* EFG employees, to laborers as well as men being paid the journeyman carpenter

wage. It was an effort to upgrade the education of the work force. No one took a pay cut to enter the program. All of the 20 men who entered at the start of the program were being paid higher wages than the minimum prescribed by the state approved Contractor Association Standards.

EFG no longer takes men exclusively from their own work force for the apprentice program. Their newest apprentice, a mason, came from the Contractor Association pool of men waiting to become apprentices.

The original cost of the program was \$500 per apprentice per year. The money was used to set up the program and begin classes, pay teachers, and buy textbooks. Within the year the program was state approved and the cost to the contractors was lowered to \$50 per man as the state paid for teachers. The money is deducted from the apprentice's pay. The man is reimbursed by the company upon completion of the program.

OJT is controlled by the General Superintendent, who is responsible for rotating men between job sites and reporting to the Contractor Association the number of hours the apprentices have worked in each of the required work processes. In theory, if a man is deficient in some work process the General Superintendent will know and rotate him to a job site where the apprentice can get the necessary experience. It is difficult to speculate what weight that factor is actually given when the General Superintendent is rotating men between job sites. EFG is no more in the carpenter training business than is BCD.

How much an apprentice learns depends on his attitude, persistence, the Job Superintendent and the man he is paired with in the morning. most of the work is done by two-man teams. If the man the apprentice is assigned to treats him as a "gofer" (go for this, go for that) the

apprentice does not learn much. It is easy for him to be intimidated under those circumstances and learn little. Often the feeling among older journeymen is that they are giving away the key to their livelihood by training replacements. These men do not make excellent teachers. The Job Superintendent can be a very effective part of the training program by taking teaching ability into consideration when making work assignments. A former apprentice at EFG said he was once assigned to a job where the Superintendent took a dislike to him. He worked as a laborer there and did not do skilled work again until he was rotated to another job.

EFG's policy of letting any of their work force undergo the apprentice program was detrimental to OJT. One-half of the original twenty dropped out in the first year. Some of these men were 35 to 40 years old, were working as laborers, and wanted to become carpenters. They stopped going to night school because the first year's work was oriented around basic math. With less than high school educations and almost twenty years in the trade they felt foolish not being able to master fractions and concepts that the 20-year old men had no trouble learning. The 20-year old men had joined the company for the same reasons the BCD apprentices had, to avoid being paid as laborers. (One man said he could work 100 years as a laborer and never do anything else.) The experience caused resentment between the two groups. A common response by a journeyman to a young apprentice's on-site questions was, "You're the smart guy, you're the apprentice. You tell me how to do it."

The related training program is the same as BCD's. A graduate of the apprentice program said that originally there were enough apprentices

for a separate class for each carpenter year group, but that now some of the classes are consolidated. His third and fourth year instructor was a Superintendent for one of the firms in town. Unlike the present instructor this teacher attacked the problem of the residential nature of the text and curriculum informally rather than finding new texts and curriculum. He did this by bringing to class material from his commercial job sites such as plans, notes and estimating worksheets, and lecturing extensively on commercial work. This man was building his own home at the time and often held class at this "site" demonstrating stair building, rafter cutting, and layout. He took the students to his commercial job sites to show them examples of problems they had studied in class.

The recent economic downturn has hurt the EFG program. There are currently no carpenter apprentices in training. Of the five men who completed the carpenter program only one is still working for EFG and his father-in-law is one of the Job Superintendents. The other four were laid off or moved away.

The apprentice graduate who is still working is currently a journeyman representative on the Contractor Association's State Apprentice Committee. He remembers problems he had collecting VA benefits for the program and laments the fact that when he was an apprentice he did not have a journeyman representative like himself on the Committee to turn to. The men at BCD who so imperfectly understand their rights and have many questions, do not know that this man represents them or who he is. Apprentice counseling is still a problem in Free Enterprise.

EFG currently has three men in a Contractor Association mason apprentice program but two of them are on temporary layoff. The Vice President

of Engineering stated that an effort is made to keep the apprentices working. They do not lay off an apprentice to keep a journeyman working. The best workers stay on the job and are laid off last.

EFG's biggest complaint with the program is that the BAT has not approved an apprenticeship program for a "general construction worker." Such a program would reflect the actual OJT that an apprentice receives at EFG. The men really are not carpenters, they are construction workers who do some carpentry.

IV.2.4. QRS Electric Company

QRS Electric Company is a large electrical subcontractor that operates throughout the rural New England state and its neighboring state. The company offices are in Free Enterprise. QRS Electric is a family owned firm started by Mr. QRS. In the late 1960's Mr. QRS Jr. took an active interest in running the company and it has grown steadily since then. QRS does not specialize. They do virtually every type and size of electrical building construction job in both states including residential, commercial, industrial and maintenance work, bidding on contracts for up to \$750,000. Seventy percent of their work is prevailing rate work.

There are presently 52 men on the payroll. QRS has a base of 40 men which they expand when needed. Four permanent foremen run the larger jobs, one specializes in residential work. The other jobs requiring only two or three men are run by a journeyman who reports directly to the General Superintendent.

Because they do strictly electrical work the difference between a

QRS electrician and a union electrician is not nearly as great as between an EFG or BCD carpenter and a union carpenter. QRS men do their own material carrying, cut through wood and concrete block partitions, patch plaster, clean up and often dig trenches for underground conduit. Union electricians may or may not do some of the above jobs depending on the locality and the size of the job. The General Superintendent is convinced that his men put more work in-place on a given day than a union force would. He believes that his men work harder and faster in the non-union tradition of loyalty to the firm, while union men are loyal to the union and work at a slower pace.

When QRS Jr. started expanding the firm he had to bring in young workers from the Free Enterprise area, many of whom had no training in electrical work. Seeing this need for formal training he participated actively in the Contractor Association's program to begin night classes in Free Enterprise. QRS has always paid the \$500 and \$50 fees directly to the Apprentice Committee, withholding no pay from the apprentices. Besides giving the apprentice a broader perspective of the trade the night school increased job efficiency by teaching the man concepts that formerly were taught on the job at the expense of the work at hand. There are currently nine apprentices at QRS. Five are registered with the state through the Contractor Association program and four are registered directly with the adjacent state in their state program.

Originally the QRS apprentices all came from the QRS work force. The General Superintendent is the Chairman of the Contractor Association State Apprentice Committee, is cognizant of the program's recruiting obligations and has hired several apprentices from the Association's pool

of men waiting to become apprentices. These men take a state aptitude test, submit a written application to the Association and are interviewed by the Apprentice Committee. Rank in the pool is determined by a point system which allocates points for the test score, interview, etc. The man with the highest total point score is placed at the top of the list.

New men hired at QRS work under close supervision. One man with an Associates degree in electronic/electrical engineering described his disappointment when he realized how ill suited his education was for work as an electrician. When he first went to work for QRS he was assigned to the residential foreman who made marks on partitions and walls indicating where he was to place receptacles. He felt he was a glorified laborer and that it would take a long time to learn the trade with only on-the-job training. When offered the apprentice program with the night training he jumped at the chance. He has now worked at QRS almost four years and has never been laid off.

OJT is the responsibility of the Job Foreman. It is up to him to ensure that the apprentices do not do the same job every day and that they are exposed to all the work at the site. It is QRS policy to have the apprentice work with different journeymen, exposing him to several ways to do a job rather than just learning a single method. The foreman keeps track of hours on various work processes and sends the records to the office weekly, where they are compiled monthly and mailed to Contractor Association headquarters for record purposes. Because of the wide variety of work that QRS does, apprentices have the opportunity for broad experience in their trade. One point made by the General Superintendent was that a union contractor in his state has a tendency to get

bigger jobs lasting two or three years, such as a nuclear power plant. On such jobs a man might be assigned to a pipe bending machine and end up bending pipe, pulling cable, or installing receptacles for two years. He said that the larger firms are more specialized and that once they have a good pipe crew they keep it. QRS jobs however are smaller and do not last nearly so long. The apprentice can learn what is needed on an industrial job and go to another, completely different job, wiring a house or a store. The apprentices also do service calls, further increasing their experience. On-the-job training is occasionally supplemented with instruction at the QRS shop when new or unusual equipment is received. Safety and installation techniques are discussed.

Because the work is traditional electrical work, and the apprentices get broad experience, the actual on the job hours correspond quite well to the hours recommended by the Association for each work process. This was not true for the carpenter programs in Free Enterprise where much on the job time was spent on nontraditional carpenter work not listed as work processes for the carpenter's program. The Free Enterprise carpenters specialized in commercial/industrial construction and received little residential experience, exacerbating the problem of reporting residential work process hours.

The related training instruction for the Free Enterprise Contractor Association Electrical Apprentices is excellent. The instructors meet with the Apprenticeship Committee monthly to discuss the curriculum. Texts, movies and demonstrations are reviewed and updated yearly. The apprentices are given periodic tests which are made up by the contractors and journeymen on the Apprentice Committee. This program is the only

evening program of the five studied where performance on tests is a serious consideration in allowing men to continue the apprentice programs. One apprentice had been dropped for poor performance on the tests.

There has been no license requirement for electricians in this state, but effective June 1976 there will be one. The course has not been slanted toward the licensing test as no one knows what will be on it. Subjects taught in the evening include basic circuit theory, blueprint reading, commercial and industrial wiring code, residential wiring code, motors and control devices.

There is no first year class this year; the second and third year groups are small but taught separately. The fourth year group is also taught separately.

The state pays the teachers \$25 per night. The Association pays \$1 per night per classroom to the school and also purchases textbooks and materials.

The fourth year instructor is a professional teacher, but has unique trade experience. He was an apprentice with his father who was a local electrical contractor. He worked as a journeyman for several years before deciding on a teaching career. He is the director of the high school's vocational cooperative program. From his viewpoint the students do not get enough practical experience on sophisticated equipment such as switching or control devices. He feels that unless a man has hands-on experience related to newly learned theory, instruction is useless, and will soon be forgotten. To correct this he brings devices to class so the student can get experience wiring them. The OJT does not get coordinated with the night instruction and so theory that should be

reinforced by job experience is lost. The General Superintendent/Apprentice Committee Chairman visits class once a week and says that some effort is made to do this, but that it is not common practice to pull a man off a job for two days and run him over to another job to see something he has learned in class, although it has been done on occasion.

One subject the course lacks, that will be added, is instruction in high voltage work. QRS currently subcontracts it out, but would prefer having in-house capability in this area.

There have been no dropouts in the QRS program although some men were laid off and took jobs elsewhere. If a man is laid off he is not required to attend night class but most of the men do.

QRS does a lot of prevailing rate work and always uses their most efficient workers on those jobs. They also use all the apprentices they can get away with, sometimes exceeding the state maximum ratios. On a recent job in the adjacent state they had eleven men: one foreman, five journeymen, three apprentices registered with the adjacent state, and two registered through the Association with the QRS state. QRS was caught by a State Inspector on that job for exceeding the 1:5 ratio and had to pull some apprentices off. They have never been caught in their own state. The apprentices do not mind travelling 2 to 2-1/2 hours to prevailing rate jobs as their pay is \$5.50 per hour on a nonprevailing rate job and \$8.66 per hour on one with a prevailing rate.

IV.3. THE INDUSTRIAL STATE

IV.3.1. Background

The industrial state, particularly the area within a twenty mile

radius of Metropolis, is well organized by construction trade unions. Non-union construction firms are primarily a suburban phenomenon. The Association drew its new members from the independent, non-union suburban contractors.

When the plan to use the Free Enterprise apprentice program as a model was short circuited by the IBEW business agent and his associates, the Association Director turned his efforts to the industrial state and the non-union firms on the outskirts of Metropolis. To his surprise, the apprenticeship program proposal was approved within 36 hours of its presentation.

At first, the Association ran their own school, starting in September 1970. For two years they hired their own teachers and taught their own curriculum. The state had programs for the trades the Association was training, but the Association wanted to keep their men away from the union apprentices. In classes where individual, non-union contractors had apprentices training with union apprentices, there had often been friction, talk of scabs, and general ill-feeling, as well as a union slant to the training, including work rules and union techniques. By having their own school, they avoided these problems, but it was expensive. The Association lacked the minimum number of students the state required per class before it would pay for the instructors.

The state approved of Contractor Association efforts to promote apprenticeship in non-union firms that had no prior apprenticeship programs. The state did not approve of transferring apprentices from existing programs into the Association program. The existing programs were the independent, state approved programs of Association members,

approved prior to the existence of the Association. The official reason given was that the Association's program was new. If the Association's program failed then the transferred apprentices would be without a program. The practical effect of the refusal to transfer apprentices indentured with member contractors in existing programs was that the Association program could not be strengthened by a core of contractors familiar with apprenticeship programs. Without the transferred apprentices, the Association could not get enough apprentices in each class to qualify for state payment of teachers salaries. The detrimental effects were magnified because the larger, established member firms who could best support apprenticeship were among the firms with independent programs.

The Association argued, to no avail, that if one of their members with an established independent program was organized by a trade union, its apprentices would be immediately transferred to the union program and indentured to a JAC. The Association believes that the real reason they were denied transfer apprentices was that organized labor had great influence with the State Division of Apprenticeship and Training. It was felt that labor wanted to keep the Association's program as weak as possible. Transfers were finally allowed in 1973, after a two year struggle involving a threat by the Association's lawyer, to subpoena state apprentice records. The lawyer wanted to show that the Division of Apprenticeship and Training was being arbitrary because transfers from independent programs to JAC programs had been allowed. By the time this happened the recession had taken its toll and the Association had already abandoned their own school in favor of the less expensive state schools. Now the union and non-union students attend classes together in many of

the trades. The director of the State Department of Education was instrumental in easing tensions. He personally ensured that complaints of non-union apprentices were investigated and that changes were made where complaints were valid.

The Association program in the industrial state recruits in essentially the same way as the rural state. Unlike the rural state however, the industrial state's Association Apprenticeship Committee is composed only of management representatives.

Apprenticeship in the industrial state is controlled much more closely than in the rural state. The BAT and the State Division of Apprenticeship and Training share the functions of servicing program accounts and promoting apprenticeship. The state has 11 field men servicing approximately 3000 program accounts, while the BAT has 4 field men servicing 250 program accounts. None of the BAT accounts are non-union programs. Even though both the BAT and state agents service accounts, all programs are registered with the state as the state has a SAC.

The maximum apprentice to journeyman ratio in the industrial state is 1:5.

IV.3.2. Lightning Electric Company, Inc.

Lightning Electric, located on the periphery of Metropolis, is a dynamic, fast growing firm. Sales volume in 1975 was \$2.1 million. Thirty percent of that volume was service and maintenance work; seventy percent was construction and installation work of which half was negotiated design/build. The largest individual contract the company has

undertaken was for \$.5 million. Most work is done within a fifty mile radius of Metropolis, although Lightning has done, and is doing, work in most of the New England states.

Lightning is the type of firm preachers of the merit shop philosophy point to as an example of the construction firm of the future. The 65-man basic field crew is virtually always working; most of the men in this group have not been laid off while working at Lightning. The 65-man base is expanded during busy periods with temporary helpers. Lightning boasts profit sharing, pension, health plans and paid vacations.

The work force is composed of service and construction divisions. The service division has eight service mechanics. These men are licensed electricians or master electricians who have a variety of additional mechanical skills such as welding and cutting. This crew services and installs heavy electrical equipment. They are capable of laying out, forming and placing concrete foundations for the equipment, after which they rig, place and align the device and make all electrical and mechanical connections. Lightning typically gets a service contract on the installed equipment and will do all periodic maintenance and repair. The service crew does work that crosses the jurisdictional boundaries of four or five trades.

The construction division is headed by three Superintendents who direct 30 licensed mechanics, 6 apprentices registered with the state through the Contractor Association program, and 12 apprentices who are working for an electrician's license but are not registered with the state as apprentices. A typical Lightning construction crew is composed of a mechanic assigned as foreman, a second mechanic and two apprentices.

This crew will be on a job for from two to four months. When that job is completed the crew may or may not be assigned as a unit to another job.

A 27-year old Superintendent discussed three differences between being a mechanic at Lightning and working as a union electrician. First, the union mechanics get assigned to larger jobs and are often specialized. Some do only rough residential wiring, some install conduit, others run pipe and others might only do finished wiring. The four men assigned to the average Lightning job do all of that work. Second, the Lightning men are not hindered by jurisdictional requirements or work rules. They do light carpentry, digging, assist in layout, and carry and clean up their own material. Finally, there is the philosophical difference. The men are not paid the same, but rather are paid according to their own proficiency and efficiency. They are competing with each other and with other crews. Eight hours work for eight hours pay is the acceptable standard. Profit sharing, year-round work, and better benefits than union workers are the basis for loyalty to the firm instead of a union. The Superintendent finished the discussion by roundly castigating the unions for raising the cost of construction and causing the recession in the building construction business.

The Lightning apprenticeship program was started in the spring of 1968. It was registered directly with the state as the Contractor Association had no program at that time. Lightning wanted a formal program to train electricians for their expanding operations. They prefer private design/build projects to prevailing rate work. During 1968 the construction industry was booming and Lightning had almost no prevailing rate work. The Vice President said that prevailing rate work was not

part of the decision to begin a program. As the firm grew and the private job volume decreased during the recession, Lightning has taken more and more prevailing rate jobs.

Originally, there was no union opposition to the program; as the Vice President remarked, "What did they care, we were small potatoes." The only difficulty in registering the program with the state was in convincing the State Apprenticeship Director that they were sincere about training, which Lightning did. Presently Lightning is registered with the state not as a separate program but as a participant in the Contractor Association program. In 1973 Lightning made the switch in order to strengthen the Association's program.

The Vice President of Lightning has been one of the "spark plugs" in the Association program. He is a past Chairman of the local chapter of the Association's Apprenticeship Committee, is an active member of that Committee, and serves as a member of the Association's National Apprenticeship Committee.

Lightning has indentured registered apprentices both from their own ranks and from the Association pool. The indentured men are studying to become construction mechanics. Occasionally a man who has had an unusually broad mechanical background will be trained for duty as a service mechanic. Few of the men registered through the Contractor Association are interested in the Association's Completion Certificate. The Certificate was important to all the apprentices in the Free Enterprise programs because it was the written document that certified that they had learned their trade. The written document that is important to the Lightning apprentices is the State Electricians License. This license

requires 6000 hours of OJT and the passing of a written examination. The Association program complies with the state and traditional union standards which require 8000 hours of OJT and 150 hours a year of related training for four years to complete an apprenticeship. Union apprentices get their licenses after three years, but they cannot complete the union apprenticeship and become members of the union until they have finished the fourth year of related training. The license is of secondary importance to them. The Association's Certificate is considered important by only 25% of Lightning's registered apprentices; 75% drop out of the program after they get their Electrician's License. The remaining 25% stay in the fourth year to get the Association Certificate. They usually leave the regular related training night classes after the third year and enroll in one of the excellent local technical schools in the evening to prepare for the Master Electrician's License Exam.

The twelve apprentices who are not registered attend evening classes and study for the license examination on their own. Often they are attending one of the two and four year technical schools in the area for an Associates or Bachelors degree in electronic/electrical engineering.

One advantage to being registered as an Association Apprentice with the state is that the men are eligible for veteran's benefits, which are substantial. In addition to his regular pay an apprentice collecting VA benefits gets \$196 a month for the first six months he is indentured and \$240 a month if he has two dependents. These benefits gradually decrease at six month intervals. The last two years the apprentice is drawing \$49 per month with no dependents and \$93 with two. Apprentices who indenture with VA benefits in mind have little monetary incentive to

continue the fourth year after they have their license.

Another advantage to being registered with the state concerns prevailing rate work. The firm must pay the journeyman prevailing rate to all of their men on a state or federal job unless the men are apprentices registered with the state, in which case they may be paid the lower apprentice rate. This rate is higher than an apprentice's regular rate paid on private work. The six apprentices registered and available for prevailing rate jobs are thus paid more than their unregistered associates. This situation creates ill-feeling and charges of favoritism. As prevailing rate work involves Equal Employment Opportunity Council reviews of the work force, Lightning Electric's lone black worker, a registered apprentice, is practically guaranteed prevailing rate work.

As in other firms already discussed, OJT is the responsibility of the Foreman. He ensures that each man learns the various aspects of the trade and has an opportunity to do each job. As the men are not specialists they are given broad exposure to the trade. The Superintendent makes an effort to rotate the apprentices to different types of construction (commercial, industrial, residential). Apprentices are quick to voice a complaint if they are consistently assigned to the same type of work.

The Contractor Association members around Metropolis have no control over related training. Evening school is funded by the State Department of Education. Each city in this industrial state has a School Committee which administers evening schools, approves curricula and teachers and makes classroom space available. The \$50 fee per apprentice per year paid by Lightning to the Contractor Association is used for

texts and Contractor Association administration costs for the apprentice program. When an apprentice is indentured the Association notifies the State Department of Education which recommends a school near the man's residence where the required instruction is available.

Electrician classes in Metropolis are taught in one of the high schools. The class consists of first, second and third year non-union apprentices. Until 1974, union and non-union students attended class together. That year racial unrest delayed the opening of schools. After waiting a month for public schools to open, the Joint Apprenticeship Committee responsible for the union electrician program elected to open their own evening school at a private Catholic school. When the union and non-union students attended class together there were enough students to warrant different teachers for different subjects and year groups. Now that the union men have left there is only one teacher assigned to the class. Formerly, this man (a professional teacher in the Metropolis school system who was a union journeyman electrician for twenty-five years and attended college in the evenings to earn a Bachelors degree) taught only the math courses for the electrician apprentices. Now he must teach years one through three (no fourth year students) all at once. He has taken a very pragmatic approach. The object is to learn what is needed to pass the license exam. The course description states this emphatically:

This course will prepare the applicant for the formal state examination for his Journeyman or Master Electrician License.

The instructor makes assignments and gives lectures on various segments of the code, every two or three weeks he gives a quiz on the material

made up of questions taken from old license exams. When his students take the state exams he meets with them immediately afterwards to record what was asked on the exam. This information is then added to the exams he gives in class. The instructor spends no time on practical work such as wiring controls or examining equipment, although he does discuss job problems in class. With students at three levels of experience he must make individual reading and homework assignments. While he is answering the questions of first year students the other students study the code.

While the OJT and related training are adequate for construction mechanics, additional night training such as welding courses are required for the service mechanics. A service mechanic must also undergo extensive OJT before he is proficient enough to make service calls alone.

Lightning's Vice President would like to change the program in several ways. He would like to have the apprentice to journeymen ratio changed to 1:3. He feels that with a growing company the 1:5 ratio restricts expansion. It also creates ill-feeling between apprentices by limiting the number of apprentices who can register with the state and thus work on prevailing rate jobs. The State License Board requires only a 1:1 ratio. This situation has resulted in six registered apprentices at Lightning and twelve unregistered ones, all working for their license. Only the registered men can work on the prevailing rate jobs at apprentice pay. The 1:5 ratio is an administrative ruling of the Department of Apprenticeship and Training which Lightning's Vice President feels is meant to protect the jobs of union journeymen in older, established firms.

The Vice President would like to shorten the Association's program from four to three years, but this is difficult as the union plan is four

years and the Association wants to avoid the appearance of an inferior program. He feels the union will not shorten its program because they have too many journeymen now and the longer program helps stem the flow of new workers.

The apprentices in both programs, union and non-union, do not receive credit for former classroom or work experience. Many former servicemen are employed by Lightning who have attended service schools and have extensive practical experience. The State Licensing Board, Department of Education, Division of Apprenticeship and Training, the Contractor Association, and Lightning Electric have all overlooked giving these men advanced placement towards license and apprenticeship OJT and related training hourly requirements.

IV.3.3. Climate Control Inc.

Climate Control Incorporated (CCI) is a firm engaged in the installation of heating, ventilating, air conditioning and refrigeration systems. Their speciality is designing, fabricating and installing systems for private clients on a negotiated basis. Less than 1% of their sales volume is state or federal prevailing wage work. CCI is located 30 miles outside Metropolis and confines most of their operations to the eastern end of the state.

In seven years the firm has grown from \$125,000 to \$1.7 million in sales. Sales this year were the same as last year despite the fact that the usual summer air conditioning peak never peaked because of the recession.

CCI is an active member of the Contractor Association. The General

Manager is the Apprentice Committee Chairman.

CCI employs a base of 40 people. The policy is to keep everyone working as much as possible; however, layoffs do occur. The last layoff was two years ago and involved ten men, all of whom were brought back to work after varying time periods. The 40-man base is usually expanded during the busy air conditioning installation season. The additional personnel are assigned to journeyman sheet metal workers as helpers.

The work force is divided into three groups: 7 refrigeration mechanics who service and install refrigeration systems, 6 inside sheet metal workers who fabricate duct systems and 17 outside sheet metal workers who do installation work. The firm also employs two pipe fitters. All of the apprentices are sheet metal workers, three are assigned to the inside crew and two to the outside one.

The inside crew is similar to a union shop in that no cross trade work is done inside. Larger union shops are specialized, one man might do the cutting, another the layout, and others the bending, welding and assembly. At CCI (and in some smaller union shops) there is no specialization. The Foreman will divide duct systems on blueprints into specific pieces for fabrication. He will write a job order for each piece and in the morning he will give each craftsman and apprentice a stack of job orders. Each man does all the work on his job orders, from layout to final assembly.

Outside work crews do considerable cross trades work including cutting (on some occasions rather than hold up a job) holes in partitions, rigging, and insulating pipe and duct work. The refrigeration mechanics also do wiring. Outside crews often use flexible duct which

union sheet metal workers refuse to handle.

As an expanding company CCI needed skilled workers. The apprenticeship program was chosen as an excellent way to train men, giving them night instruction and incentive by realistically raising a man's pay at specified intervals. It was felt that this way the man could set goals and know at what proficiency level he should be. All of the CCI apprentices are paid more than the required rate. Men in the same year group are not paid the same; each is paid according to proficiency. The \$50 per apprentice per year fee is paid by CCI.

There was no union opposition to the program. The sheet metal workers local has 1400 members with 400 men out of work. The union is showing no great interest in training at this point in time. CCI avoids union opposition as bad business. The unions have held up jobs where CCI was the only non-union subcontractor, on occasion CCI has had to negotiate with the local sheet metal union to end job slowdowns and picketing by other trades on a job. The price for an end to opposition was subcontracting to a union sheet metal shop part of CCI's own subcontract. As CCI does little state or federal work, confrontations with the union are not common.

CCI gets its apprentices from its own work force. The General Manager remarked that there are very few men in the Association pool awaiting indenture (he thought as few as five). As with Lightning Electric, the 1:5 apprentice to journeymen ratio limits the number of apprentices CCI can have indentured at one time. As an expanding company CCI opposes the ratio, claiming that it denies apprenticeship opportunity to young men looking for work, and limits CCI's ability to train its own work force.

CCI has found that the apprenticeship program is more applicable to its inside sheet metal fabricators than the outside forces. Currently they train three inside apprentices and two doing outside work. Because five apprentices is their limit allowed by the 1:5 ratio, CCI must wait until the two outside men have finished their apprenticeship before hiring any more inside apprentices. CCI's apprenticeship openings will go to inside men in the future.

As with apprentices in other companies, CCI apprentices became indentured to learn, and achieve the security that comes with learning a trade. One man expressed a desire to start his own business. None of the apprentices is considering dropping out or leaving CCI without the Association Apprenticeship Completion Certificate.

On-the-job training for the outside men is the responsibility of the Job Foreman. This training is much the same as with Lightning electricians. There is no formal rotation system between sites; at the end of four years the men have been exposed to all of the various work processes involving outdoor work. The 8000 recommended hours of sheet metal work processes, when divided into indoor and outdoor categories favor indoor work by a slight margin. The outside men are rotated one month a year to inside work for exposure to shop work processes.

OJT for the shop apprentices is better supervised than that of the outside, installation men. The apprentices get job orders from the foreman in the morning and are expected to do all the work required to complete each piece. The apprentice reviews his daily orders to see if there is anything he will have difficulty with and if there is something he does not know how to do, he informs the foreman.

The foreman has been in the business 20 years. When he was learning the trade he was hindered by the "I can't teach you too much about this or you'll be bucking for my job" method. To ensure that the apprentices learn what is needed on each task he insists that they bring all questions to him. He then goes to the apprentice's work place and gives instruction on the necessary procedures. The inside men are rotated outside one month a year to get exposure to the installation work processes.

Some OJT is needed to correct what management feels are expensive traditional methods learned in related training. No specific examples were cited, but in general CCI men have modified many textbook techniques cutting time and cost requirements. Additional time is spent on the job to learn welding which is not taught in related training.

Time cards are filed daily by the apprentices and checked by the Foreman. The apprentice writes the hours spent on each work process in the spaces provided. These hours are compiled monthly by the office staff and mailed to the Contractor Association for record purposes.

Related training is organized and funded in the same manner as that for Lightning Electric students. The class is made up of non-union apprentices only. All the union sheet metal apprentices have been assigned to a high school in Metropolis by the State Department of Education. The non-union sheet metal apprentices get assigned to various suburban high schools.

The instructor is a recent graduate of the union apprenticeship program and a professional shop teacher in the local schools. He was certified to teach apprentices related training by the State Department of Education. The instructor works as a journeyman sheet metal worker

in the summers.

At the beginning of the year the class consisted of first, second and third year students, but one firm went out of business and the first and second year men dropped out of the program. With only four third year students the instructor finds he can lavish attention on the individual needs of the students. The curriculum and texts were chosen by the instructor and approved by the local evening school supervisor. The four students and the instructor have been together for three years. In the first year the class concentrated on math, in the second on layout of elbows, transitions and other commonly made pieces of duct; the third year has been spent on blueprint reading.

Class begins with general discussion about the trade and any problems encountered on OJT. The instructor has visited the shops where the students work and has discussed their progress and training needs with their shop foremen.

One drawback to the instruction is the lack of a shop, classes are taught in an ordinary classroom with no sheet metal facilities. The instructor must use paper for demonstrations.

Some assignments are given but nothing is graded. If you attend, you pass. The idea is to be exposed, not to memorize.

The instructor is skeptical of union and non-union employers' intentions when hiring apprentices. He feels that the apprentices don't get rotated between machines or jobs to the extent that they should be to master a trade.

If given a free hand to run the program as he would like, without state ground rules, the CCI General Manager would make several changes.

He would allow more than one apprentice for every five journeymen so he could expand his work forces with men trained by the Company. The apprenticeship for men who do mainly installation would be shortened from four to two years and he would give them instruction in flexible duct installation and machinery rigging and installation at related training. He is satisfied with the related training his shop apprentices receive. The chief benefit involved in staying with the state program for CCI is financial. It would be expensive to set up a school independent of the state. This could be done through the Association, but only at the expense of loss of state apprentice registration. Although CCI does no prevailing rate work and is not troubled by such a loss, other contractors would be. Apprentices receiving veterans benefits would also suffer. Because of these factors CCI has no plans to scrap the state sponsored program and substitute one of its own.

IV.3.4. Flannery & Magee

Flannery & Magee (F&M) are friends, next door neighbors and equal partners in a 27 year old carpentry contracting firm which bears their names. F&M had \$600,000 in sales in 1975. The typical F&M job is a \$200,000 subcontract (involving all rough and finished carpentry) for a general contractor, building state or federally financed garden apartment complexes for the aged and low income groups. Seventy-five percent of F&M's dollar volume is this type of prevailing rate work. Most of F&M's work is done between the two circumferential beltways ringing Metropolis with radii of twenty and forty miles. F&M had no altercations with organized labor until recently when the firm worked on jobs inside

the twenty mile radius beltway. These jobs have been illegally picketed by unemployed union carpenters protesting the contract awards to non-union contractors.

Flannery & Magee began their careers in construction after WW II as carpenter apprentices in a Metropolis, union, apprenticeship program under the GI bill. After two years both men were being laid off regularly. Frustrated by the favoritism of the union's referral system Mr. Magee moved out of Metropolis and began building houses for a non-union home builder. Flannery soon joined him and after one year Magee said to Flannery, "We can do this." They left the home builder and began working for themselves. The firm started out building homes on speculation but decided that subcontracting on large projects offered the chance for greater profit.

F&M has a flexible work force. The average number of men employed at any one time is twenty. Mr. Magee said there was no secret to their success; both he and Mr. Flannery work as foremen on their projects and oversee every detail on a job. They demand eight hours work for eight hours pay and only hire men they know are "hustlers." The firm runs two or three jobs at once. Mr. Flannery and Mr. Magee each act as foremen on a job and Mr. Magee's 27 year old son can direct a third job. The firm is production oriented. They divide their crews into two-man teams, each specializing in a specific task. One team will work through a project doing nothing but lower level framing, while another team does second second level framing. The entire crew works on roof erection. One man is assigned to a power saw and does the millwork. The foreman directs, and controls the pace of the work, from the seat of a forklift. The

forklift is used to deliver material to the "mill" for cutting; cut work is then delivered via the lift to the various teams for installation. While unloading material for the team the foreman monitors job progress.

F&M currently employs three apprentices registered through the Association program, two pre-apprentices (men who are undecided if they want to be indentured--they attend no formal pre-apprentice class) and fifteen carpenters and carpenter tenders.

Mr. Magee feels that the F&M operation differs somewhat from that of a union contractor's. F&M uses every technical advantage available including pre-hung doors and windows, pre-cut stairs and assembled roof trusses. There is no overtime, all work is done on a 40-hour per week basis. F&M also does slab work including forming the slab, placing the steel reinforcing bars, placing the concrete, and finishing the surface. Their crews also operate power equipment such as generators, pumps, forklifts and cranes.

F&M wanted an apprenticeship program to train their own carpenters. As one time apprentices, both Mr. Flannery and Mr. Magee understand the value of the training and the role it plays in resupplying the construction work force. Mr. Magee's youngest son will be indentured to the firm in 1977.

All F&M apprentices had previously worked for F&M and were known to be men likely to remain with the firm, with the notable exception of three blacks from the "Metropolis Plan." When informed by an Equal Employment Opportunity Council representative that F&M must make an effort to employ more minorities on their prevailing rate jobs, Magee & Flannery went to representatives of the "Metropolis Plan" (plan for the admission

of interested minority workers to construction jobs). None of the three blacks still work for F&M. Mr. Magee said that two of them were in their thirties and were really too old to be apprentices. All of the blacks expressed a desire to find indoor work after one year at F&M and left the firm. The other F&M apprentices were informally indentured taking no aptitude test and undergoing no interviews. Two of the F&M apprentices are college graduates. They plan to continue to work for F&M but will no longer attend night school which they feel is poorly taught and unnecessary. Mr. Magee has assured both men that even though their registration will be discontinued he will continue to give them regular raises as if they were still enrolled in a formal program.

OJT is informal in the extreme at F&M. An apprentice is assigned to a journeyman as part of a two-man crew. While on a given job the crew will specialize and the apprentice will not be rotated. Mr. Magee believes that the apprentice will be exposed to all the types of work he needs to be a carpenter with two years of work at F&M, and that a rotation plan is not necessary. Mr. Magee fills out the data forms for reporting hours spent on carpenter work processes in advance. In fact, there are four years worth of forms already made out for each apprentice! These are sent to the Contractor Association monthly. When an F&M man completes his apprenticeship the OJT record will show that he spent 1000 hours on exterior mill work, 500 hours on floors, 1000 hours on interior finish, etc., precisely the total number of hours required by the state for each work process. Mr. Magee has informed the Apprentice Committee that he is doing this and has expressed his dissatisfaction with what he believes is unnecessary paper work.

Related training is administered in the same manner for F&M as for Lightning Electric and Climate Control Inc. The union carpenters however do not have a separate school as is the case with the electricians and sheet metal workers. Evening school for F&M apprentices is taught at a large regional vocational technical school southeast of Metropolis. The class has 14 apprentices, of which half are apprentices to non-union contractors and half to a Joint Apprenticeship Committee (union program). The instructor is a former 30-year, union carpenter journeyman and Superintendent.

There is no animosity between the union and non-union men. The instructor said that most men who are now union carpenters had learned the trade or had worked for non-union employers. Virtually all of the union apprentices have been laid off and have taken part-time jobs outside construction. His only comments about the non-union sector were his beliefs that non-union apprentices did mostly residential work and that non-union carpenters as a group only received wage increases when the union sector did.

The curriculum was developed by a state board of vocational school teachers who specialize in carpentry. The instructor says he modifies this, spending less time on things like introduction to tools and hardware, and more time on math. The curriculum is for four years. Students at all four levels are taught in the same classroom by the one instructor. The first year he taught the first year curriculum, the second year the second, and next year he will teach the third year curriculum. First year students beginning class next year will start on third year subjects and will have to keep up with the rest of the

class. A considerable amount of class time is spent answering questions of the first year students who occasionally get lost in the more advanced aspects of the work. The rest of the class dozes while the instructor clarifies a point for the first year student.

The instructor makes reading assignments from a carpentry text and gives tests for comprehension. The grades are only used to indicate to the instructor what topics need clarification. Commenting on the purposes of the grades the instructor said:

We don't play any kid games here. If a man attends class he gets a satisfactory grade, these men come here because they want to learn.

The instructor feels that the systematic methods taught in class for layout work will qualify them for foreman and supervisor jobs. He made the point that it is hard for men to learn layout on the job.

Mr. Magee feels that two years instead of four is enough to train a carpenter apprentice. He sees little need for 75 hours of welding for a carpenter. Mr. Magee also notes that the evening instruction does not reflect any new technology such as the already mentioned pre-hung doors and pre-cut stairs.

As with the other Association Contractors, Mr. Magee finds the 1:5 apprentice to journeyman ratio a hinderance to his operations. He has had to modify his work force on prevailing rate jobs when state inspectors discovered he was using more apprentices than allowed by the ratio. Mr. Magee has discovered that the union collective bargaining agreement allows for one apprentice for every two journeymen when assigned to residential work and allows one pre-apprentice for every two apprentices. Mr. Magee questioned the State Department of Labor, Apprenticeship and

Training Field Representative on the legality of the union's ratio and received no satisfactory answer. He then informed the Field Representative that his next prevailing rate job would be manned in the following manner: four carpenter journeymen, four carpenter tenders, four apprentices, and two pre-apprentices. The Field Representative did not know if that manning would be legal or not. Mr. Magee intends to man the job that way having heard no more from the Field Representative.

V. CONCLUSIONS

Conclusions of the study are presented in this chapter. These conclusions are based on data gathered in the case studies, and on the background research presented in Chapters II and III. The sub-topics of this chapter are detailed discussions of the interest areas listed in IV.1.

The generality of these conclusions may be somewhat limited, since the study was confined to New England and to the non-union apprenticeship programs of a single contractor association. However, by studying both a rural and an industrial state, and by including programs of different trades and skill levels, it is felt that many of these conclusions may be broadly applicable to non-union apprenticeship training in other parts of the U.S.

V.1. WHY APPRENTICESHIP?

With the exception of EFG Co., Inc., which was already a large construction firm, the non-union firms studied experienced considerable expansion during the construction boom of the late Sixties and early Seventies. This was particularly true of the firms near Metropolis. During the boom there was a shortage of skilled workers. The construction trade unions concentrated on placing men on the huge projects being developed inside Metropolis. These large projects were capable of employing large numbers of construction workers for two and three year periods. The non-union firms in the suburbs of Metropolis concentrated on small and medium sized projects on the outskirts of the city. The projects were mostly private as opposed to public construction, and were very profitable. The firms expanded with no union opposition. As the Vice

President of Lightning Electric remarked, "...What did they care, we were small potatoes." CCI developed from a \$127,000 a year HVAC contractor to a \$1.7 million operation during this period. The non-union firms grew, they were efficient, and as they grew they developed their own organization, the Association, to protect their interests in the National and State Legislatures. In Free Enterprise the non-union firms defeated union organizing campaigns. They had no real opposition from union contractors and received the full benefits of the general growth of the economy. These firms also grew. The growth brought with it a need for skilled tradesmen. In the full employment economy these were not immediately available. A training program was needed and apprenticeship was, and is attractive for several reasons.

One reason is that the apprentice is indoctrinated in non-union philosophy. He is not exposed to slower union methods, work rules, job stewards, slow downs, strikes, and a single wage. The non-union firms near Metropolis personify the best aspects of non-union construction work from the tradesmen's standpoint--year-round work; minimum layoffs; profit sharing plans; full benefits; and hourly wages which, while not as high as union hourly wages, are considerably higher than those of industrial workers. It suited a non-union firm's long-range plans and philosophy to expand with men trained in, and loyal to, the parent firm.

Apprenticeship is desirable for other reasons. Considerable time can be lost on a job explaining the technical or theoretical aspects of a trade. Subjects such as estimating materials, layout, blueprint reading and codes/regulations are better learned in a classroom, after hours. Another desireable aspect of the apprentice program is the inherent

structure of apprenticeship. It is a well ordered way to learn. A young man knows from the start that he is committed to learn the trade, management has a commitment to teach the apprentice. The apprentice is "officially" learning the trade, there is no sense of dabbling or of just "picking up" the skills. Progressive wage increases reinforce the learning process by providing built-in goals and incentives. A sense of accomplishment is further reinforced by a license or a completion certificate "officially" attesting to the apprentice's acquired skills.

The above benefits of apprenticeship are considerable, but there are further benefits for both the apprentice and the firm if the program is registered with an SAC or the BAT. The most immediate benefit to the six firms studied is the availability of state funding for related training instructors. The original cost of the programs in both states was \$500 per apprentice per year, which was paid by the contractors. After state funds were made available this cost dropped to \$50 per apprentice per year.

A desirable aspect of a registered program from the apprentice's viewpoint is the availability of supplementary income from the Veterans Administration. Such funds are not available to apprentices of non-registered programs.

The importance of registered apprentice programs for Davis-Bacon or state prevailing wage, public work is often cited by students of the construction industry. Only registered apprentices may be paid lower apprentice wages, other men must be paid the journeyman rate regardless of their skill. This law was not a factor when the Association first tried to establish their apprenticeship programs in the two states.

Except for EFG Co. Inc., which was doing 20% public work, the firms

studied were doing virtually all private work in 1969-1970. Since that time some of the firms have expanded their horizons. With the coming of the depression in the construction industry many union, as well as non-union contractors went out of business. The non-union firms that have survived did so in part because they were willing to aggressively pursue public, as well as private contracts. QRS Electric now does 70% public work, and Flannery & Magee expanded their public work to 75% of their sales volume in the last three years. Lightning Electric specified no percentage, but said that public work is now a considerable portion of their sales volume. CCI and BCD still do essentially only private work and EFG Company, Inc. has remained constant with 20% public work. The importance of the Davis-Bacon aspect of Apprenticeship has therefore increased since the founding of the programs in the early Seventies.

Regulation 29 CFR 5a, which required at least one apprentice for every five journeyman (25% of apprentices had to be first year) on public jobs, played no part in the development of the Association's program in the two states studied. This requirement was in effect from January of 1972 until July of 1975 when 29 CFR 5a was changed to mean that a maximum of one apprentice to every five journeymen was permissible. Both state and federal officials, as well as contractors, were either entirely ignorant of this regulation or only vaguely familiar with its requirements.

V.2. WAYS IN WHICH THE NON-UNION WORK FORCE IS UTILIZED DIFFERENTLY THAN A UNION WORK FORCE

Differences between union and non-union utilization of the work force, with respect to tasks, depended on the type of construction done by the firms studied. The two general contracting firms from Free Enter-

prise employ laborers and carpenters. The carpenters could actually be called general construction mechanics. They do a considerable amount of work that would not be included within the jurisdiction of a union carpenter. This non-traditional work called "cross trade" work, consists of cement finishing, steel erection, masonry, and equipment operation. Union carpenters would be violating trade jurisdictions if they engaged in any of the tasks listed.

The work forces of the electrical and HVAC firms do not engage in significant amounts of cross trade work. The main task differences occur as a result of the non-union contractors affinity for medium and small sized construction projects. Union firms generally engage in larger projects than the non-union firms studied. These large projects last several years. The union firms utilize specialists in the trade. For example a union electrician working on a nuclear power plant might "pull wire" and "hang pipe" for two years. The non-union firms engage in a wide variety of work, doing small and medium industrial, residential and commercial jobs lasting two to six months. Instead of using specialists the non-union firms use small crews that do everything. For instance, the electricians "bend pipe" and "pull wire," but they also lay underground conduit, and install wire fixtures and devices. The non-union men consider themselves all-around tradesmen because they not only do all of the work associated with their trade on each job, but the jobs only last two to six months and then the men are assigned to other jobs, possibly doing a different type of construction. Another example of the broad nature of the work is the CCI sheet metal fabricator who is responsible for the complete construction of each piece from layout to assembly. Many union

sheet metal shop workers are assigned only one task in that process such as running a cutting machine. Flannery and Magee, the carpentry contractor, is a definite exception in this respect. They specialize in one type of construction, two story, publicly financed, garden apartments. Their crews specialize on each project doing one task (such as framing all of the lower stories in an apartment complex).

While the task differences between union and non-union work forces vary with the trade, general working conditions and attitudes toward the employer do not. All six non-union firms emphasize the necessity of personal efficiency on the part of each employee. Employees are not paid a standard rate such as in a union firm. Wages vary according to management's perception of each man's efficiency. Overtime is used infrequently; all work is normally done in a standard eight-hour shift. All of the firms believe that the absence of work rules, jurisdictional squabbles, product boycotts, strikes, etc., result in their work forces being much more productive than a union force. Non-union firms claim that their employees are loyal to the firm, not to a union. This "loyalty" was found to be present in most cases, particularly in the two electrical firms and the HVAC contractor where there was a special effort made to keep all of the "core" employees working steadily, and lay-offs were rare. Employees in firms located near Metropolis benefit from the proximity of union firms who generally have better benefits than non-union firms. The non-union firms near Metropolis are in general, more concerned with benefits and employee welfare than the Free Enterprise firms. Free Enterprise is a place where job opportunities are limited, and unions are absent, so that the labor market favors the employer.

V.3. HOW RELATED TRAINING (NIGHT SCHOOL) REFLECTS THE DIFFERENCES IN WORK FORCE UTILIZATION

The extent to which related training reflects non-union work force utilization depends on the state. In the rural state the curriculum and teachers are entirely controlled by the Association's State Apprenticeship Committee. Thus, the carpenter curriculum includes instruction on steel erection and other cross trade training. The electrical course devotes considerable time to practical work such as wiring devices, as well as the traditional blueprint reading and code application. The Association contractors in Free Enterprise are able to control the program and tailor it expressly to their needs because there was no existing state program. The program they set up is funded by the state.

In the industrial state the Association contractors originally had their own school and teachers, shunning the established union oriented state schools. This independent program was expensive however, and the Association Apprenticeship Committee elected to use the state's schools and teachers which are fully funded by the state. The decision to do this however, resulted in complete loss of control over the curriculum. Thus, the industrial state's Association Apprentices get evening training that reflects union practice. This deficiency is made up by OJT.

As is typical of apprenticeship programs, neither state has real coordination between related training and OJT except informal discussion with the evening school instructors. The industrial state's program is plagued with a lack of separation between apprentices of different year groups. Both the electricians and the carpenter program have students of all year groups in one class, making it difficult to lecture to the

class at large.

The Association programs in both states fail to take advantage of the provisions available for advanced placement of apprentices with prior training. In the six firms studied only one apprentice was encountered who had been advanced because of previous trade school learning.

V.4. HOW OJT REFLECTS THE DIFFERENCES IN WORK FORCE UTILIZATION

OJT in the firms studied is extremely unstructured. The apprentices go to a job site and sometimes they are assigned to a journeyman and sometimes they work alone. The advantage to being an apprentice on-the-job is that you are assigned to skilled rather than unskilled tasks. Rotation between tasks for the sake of meeting the recommended number of hours per work process is unusual. Records of OJT are largely ignored except for the total number of hours. Total OJT hours are important because apprentice raises occur after six months and 1,000 hours. You must have the requisite number of OJT hours to get a raise, a license, or certificate of completion. CCI makes an effort to rotate sheet metal fabricators to installation work one month of the year and vice-versa. This is the only example of a planned rotation. The majority of contractors feel that rotation is not necessary because the large variety and short duration of the jobs most of them perform give the apprentices a broad, general background in their trades. The OJT reflects exactly the differences between union and non-union force utilization, because OJT is nothing more than the opportunity to work at the trade in the manner that the contractor specifies. Thus, "carpenter" apprentices in Free Enterprise do considerable cross trade work and electrician apprentices in both areas

receive broad experience in their trade due to the wide variety of work and small crews used by the non-union electrical contractors.

V.5. APPRENTICE PERCEPTIONS OF THE PROGRAMS

Apprentice perceptions of the programs relate primarily to job security. In Free Enterprise the apprentices working for general contractors believe that the apprentice program is the only way to short circuit the traditional Free Enterprise route to skilled worker status. This traditional route consists of working as a laborer at less skilled jobs until management believes that the worker has learned enough on the job to warrant being paid as a skilled mechanic. The common belief is that the time period involved might be forever. The apprentice program provides a guaranteed way to receive the higher, skilled mechanic wages in a span of only four years. For both the Free Enterprise carpenter apprentices and electrician apprentices the symbol of job security is the Association's Certificate of Completion of Apprenticeship. It is important to the apprentices to have that certificate. This is true also for apprentices in the industrial state with the exception of those at Lightning Electric. Their symbol of job security (training completion) is the state electrician's license. It requires only three years to obtain a license and four years to complete an apprenticeship. The license is the important security symbol for them; 75% of these apprentices have dropped out of the apprentice program after completing three years.

Only two of the apprentices presently in the other firms have decided to drop out. None of the others believe they could make more

money in any other field and all are thankful that they are in the program, learning a trade, and working steadily. This is particularly true for the Flannery & Magee apprentice. He attends related training classes with union carpenter apprentices, who are working on part-time jobs outside the construction industry. The two apprentices who have decided to drop out are college graduates working for Flannery & Magee who feel that the evening instruction is terrible. They have made a gentleman's agreement with Mr. Magee to let them drop out of the official program, and still receive the same raises they would have gotten had they remained in the program. Both feel that they could learn layout and blueprint reading on their own.

Those apprentices in firms that do a considerable amount of Davis-Bacon work fully realize the value of being registered apprentices. Contractors doing this work will use only registered apprentices on those higher paying jobs. There is no incentive for them to use a non-registered apprentice who must be paid the journeyman's wage, but is incapable of doing all a journeyman can.

Although the Marshall, Glover, and Franklin study (footnote #10, Chapter II) shows that union apprentice trained craftsmen have a good chance of becoming supervisors or foremen, there is no comparable evidence for the non-union construction industry. Apprenticeship is new in this sector of the industry and though it might be presumed that apprenticeship will be the training ground for future supervisors there is no current evidence that this is the case. The apprentices feel that they are receiving good training, but express few opinions concerning possible possible future supervisor status, other than they they hope to be

supervisors or foremen.

None of the apprentices have copies of their indenture agreement, most of them having misplaced their copies. They are unsure of their rights. At BCD Corporation there were several misunderstandings which are cited in that case. Apprentices in other firms also have questions about their indenture agreement and do not know where to go for the answers.

V.6. FUNDING

In both states the Association's programs are registered and therefore the respective state Departments of Education are paying instructors. Because the Association's program is the only one available in Free Enterprise, they are able to exercise complete control over the program and yet the state pays for the teachers. The Association program in the industrial state is not so fortunate. Before the state will pay for instructors there must be a minimum number of students in each class. In the first two years, the Association lacked the minimum number and had to pay for the teachers themselves. There was an existing state program, and state funds were available for that program. The Association therefore decided to abandon their own school and teachers in favor of the state program. By so doing, they lost all control over curriculum and instructors.

In both states each contractor pays \$50 per year per apprentice to cover the cost of Association administration of the program, classrooms in the case of Free Enterprise, and texts for the apprentices. As in union programs there is no guarantee that upon completion of apprentice-

ship the former apprentice will remain with the firm.

Unfortuantely in most programs studied, the first year of related training is devoted to a review of fractions and other basic math taught in the public schools. In effect the state is paying twice to impart certain basic concepts to the apprentices. Several of the contractors lamented this wasted time and criticized public secondary education.

V.7. RECRUITING

Ostensibly the Association recruits apprentices from the public at large, tests them, interviews them, ranks them in a pool and indentures the top ranked men from the pool. This procedure is described in greater detail at the beginning of Chapter IV.

The pool is used by some of the contractors interviewed but not by others. Most apprentices in the Association originally worked for the firm to which they are now indentured. Their screening process was informal. The current depression in the construction industry renders the pool almost useless. Some of the firms studied are doing all they can to keep the men working who are currently on the payroll. Others would hire more apprentices if they could, but are limited by the state's 1:5 apprentice to journeyman ratio. The chairman of the industrial state's apprentice committee believes that there are only five men in the pool.

V.8. MINORITY PARTICIPATION

There is little minority participation in the non-union apprentice programs studied. In the six firms, only one black apprentice was employed. Statistics in Chapter III show that this is true on a national

basis also. There is one fundamental reason why this is so in the two states studied. In both areas there are few minorities. In rural Free Enterprise there are practically no blacks whatsoever. The firms operating outside Metropolis are based in the suburbs and draw their labor supply from the suburbs. Few blacks live in these suburbs, and minorities from Metropolis' inner city infrequently seek employment outside of the city. Flannery & Magee have been approached by EEOC and Office of Federal Contract Compliance personnel concerning the lack of blacks on their labor force. As related in IV.3.4., Flannery & Magee dutifully called on the Metropolis Plan, Office for minority recruits, who worked with them a short time and returned to the inner city. The CCI Vice President stated that few blacks apply to the suburban firms for work. It appears that there is no conscious or systematic discrimination at work, instead it appears that the demographics of the suburbs work against integration of these firms. Openings are often filled by word of mouth communication between contractors who keep in touch with former employees. The inner city blacks simply are not a part of that information network.

V.9. CHANGES IN THE PROGRAM DESIRED BY NON-UNION CONTRACTORS

Two of the contractors want to shorten the program. Mr. Magee, of Flanner & Magee, feels that it does not really take four years to learn carpentry. That firm is engaged strictly in residential, framing type carpentry and for their purposes Mr. Magee is probably right. The two general contractors of Free Enterprise, who do a wide variety of steel, wood framed and concrete structures disagree. Their men must master a number of skills other than carpentry and these companies feel that it

takes at least four years to be properly trained. The Free Enterprise electrical firm, QRS Electric, and the Metropolis HVAC contractor, CCI, also feel that four years is needed. Lightning Electric feels that the four year program should be shortened to three years to bring it in line with the industrial state's three year requirement for an electrician license.

The two Free Enterprise general contractors want to call their apprentices general construction mechanics rather than carpenters. Although the men do some traditional carpentry on the job, and spent most time in related training studying carpentry, they are really skilled generalists. The two contractors concerned simply want the title to reflect the job. If accepted by the government the use of the term "general construction mechanic" would streamline prevailing rate procedures. The firm currently has to struggle with assigning the same men as masons, ironworkers, or carpenters (traditional prevailing rate classifications) on different days, which complicates record keeping.

The one change desired by all six firms concerns the 1:5 apprentice to journeyman ratio limit in both states. The ratio affects the apprenticeship program in two ways.

One major effect of the ratio is to limit an expanding firm's ability to train their own work force. Firms feel that training their own workers is desirable for two reasons--developing a sense of loyalty to the firm and indoctrinating craftsmen in the non-union methods of the trade.

The second major effect of the ratio is to limit the number of men that can be paid the lower apprentice wages on Davis-Bacon work. For a firm like Lightning Electric with a construction division consisting of

30 licensed mechanics and 18 apprentices (6 registered), this means that even though apprentices comprise about 40% of the construction force, on Davis-Bacon jobs a second apprentice cannot be used until five journeymen are on the job. The non-union contractors claim that the ratio should not be imposed on them. They also claim that the ratio was really desired by the union construction sector to help protect the integrity of the journeyman's wage, by limiting the number of apprentices in training. The non-union contractors reinforce this claim by citing that the industrial state's requirement for apprenticeship supervision for license purposes (plumbing, and electricians) allow a 1:1 ratio.

The ratio, an administrative ruling by the industrial state's Department of Labor, was challenged in a recent court action. The state sued a non-union plumbing contractor for having more than the allowed ratio of apprentices on a job. The suit involved the difference in wages, between the pay the men received as apprentices and the amount they should have received as journeymen. The apprentices refused to testify against their contractor. The plumbing contractor admitted partial guilt, paid the state about one-third of the amount claimed by the state (to be paid to the apprentices as wages due) and countersued the state on several counts, some technical, one of which was that the state licensing agency only required a 1:1 ratio. The trial judge found this interesting to the point that the state dropped their action against the contractor (and never did forward the money surrendered by the contractor to the apprentices in whose name the suit was filed). The contractor, unhappy with the ambiguity of the situation, but not willing to stimulate organized labor to lobby for a legislative action, also dropped his suit.

As in most public debates the central problem with the 1:5 ratio is really money. Three of the six firms studied avoid Davis-Bacon work, claiming that the paperwork and attendant regulations are ridiculous. The three firms who do considerable amounts of Davis-Bacon work resent having to pay the prevailing wage, which for all intents and purposes is the union wage. They end up paying the men assigned to prevailing rate jobs more than the men would get on private work. This creates a morale problem when a man is reassigned to a private job or when a man is not chosen as part of the work force for a public job. These firms use as many apprentices as possible on public work to keep the total wage package low, facilitating a low bid.

Enforcement of the ratio is more vigorous in the industrial state. Thus Lightning Electric follows the rules to the letter, and Flannery & Magee are going to outflank the rules by using the same manning ratios as union carpenters do on residential work, while in the rural state, (land of opportunity) QRS Electric utilizes a "max allowable plus" mix, while engaged in a clever two state juggling act with registered apprentices from both states. QRS retreats obediently and contritely whenever caught.

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APPENDIX A

The National Apprenticeship Act

To enable the Department of Labor to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices and to cooperate with the States in the promotion of such standards.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Labor is hereby authorized and directed to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies engaged in the formulation and promotion of standards of apprenticeship, and to cooperate * * * with the Office of Education in * * * accordance with section 6 of the Act of February 23, 1917 (39 Stat. 932), as amended by Executive Order Numbered 6166, June 10, 1933, issued pursuant to an act of June 30, 1932 (47 Stat. 414), as amended.*

Sec. 2. The Secretary of Labor may publish information relating to existing and proposed labor standards of apprenticeship, and may appoint national advisory committees to serve without compensation. Such committees shall include representatives of employers, representatives of labor, educators, and officers of other executive departments, with the consent of the head of any such department.

APPENDIX B

91:7501
MIS-RF-37

Regulations of the U.S. Department of Labor on Equal Employment Opportunity in Apprenticeship and Training¹

Code of Federal Regulations Title 29, Part 30

Sec.

- 30.1 Scope and purpose.
- 30.2 Definitions.
- 30.3 Equal opportunity standards.
- 30.4 Affirmative action plans.
- 30.5 Selection of apprentices.
- 30.6 Existing lists of eligibles and public notice.
- 30.7 Completion of approved preapprenticeship programs.
- 30.8 Records.
- 30.9 Compliance reviews.
- 30.10 Noncompliance with Federal and State equal opportunity requirements.
- 30.11 Complaint procedure.
- 30.12 Adjustment in schedule for compliance review or complaint processing.
- 30.13 Sanctions.
- 30.14 Reinstatement of program registration.
- 30.15 State Apprenticeship Councils.
- 30.16 Hearings.
- 30.17 Intimidatory or retaliatory acts.
- 30.18 Non-discrimination.
- 30.19 Exemptions.

AUTHORITY: The provisions of this Part 30 are issued under sec. 1, 50 Stat. 664, as amended; 29 U.S.C. 50; 40 U.S.C. 276c; 5 U.S.C. 301; Reorganization Plan No. 14 of 1950, 64 Stat. 1267, 3 CFR 1949-53 Comp., p. 1007.

§ 30.1 Scope and purpose.

This part sets forth policies and procedures to promote equality of opportunity in apprenticeship programs registered with the U.S. Department of Labor or with the U.S. Department of Labor or with State apprenticeship programs registered with recognized State apprenticeship agencies. These policies and procedures apply to the recruitment and selection of apprentices, and to all conditions of employment and training during apprenticeship, and the procedures established provide for review of apprenticeship programs, for registering apprenticeship programs, for processing complaints, and for deregistering noncomplying apprenticeship programs. This part also provides policies and procedures for continued or withdrawal of recognition of State agencies for registering apprenticeship programs for Federal purposes. The purpose of this part is to promote equality of opportunity in apprenticeship by prohibiting discrimination based on race, color, religion, national origin, or sex in apprenticeship programs, by requiring affirmative action to provide equal opportunity in such apprenticeship programs, and by coordinating this part with other equal opportunity programs.

§ 30.2 Definitions.

(a) "Department" means the U.S. Department of Labor.
(b) "Employer" means any persons or organization employing an apprentice whether or not the apprentice is enrolled with such person or organization or with some other person or organization.

¹ Last revised April 8, 1971.

(c) "Apprenticeship program" means a program registered by the Department and evidenced by a Certificate of Registration as meeting the standards of the Department for apprenticeship, but does not include a State apprenticeship program.

(d) "Sponsor" means any person or organization operating an apprenticeship program, irrespective of whether such person or organization is an employer.

(e) "Secretary" means the Secretary of Labor, the Assistant Secretary of Labor for Manpower or any person specifically designated by either of them.

(f) "State Apprenticeship Council" means a State apprenticeship council or other State agency in any of the 50 States, the District of Columbia, or any territory or possession of the United States, which is recognized by the Department as the appropriate agency for registering programs for Federal purposes.

(g) "State apprenticeship program" means a program registered with a State Apprenticeship Council and evidenced by a Certificate of Registration or other appropriate document as meeting the standards of the State Apprenticeship Council for apprenticeship.

(h) "State program sponsor" means any person or organization operating a State apprenticeship program, irrespective of whether such person or organization is an employer.

§ 30.3 Equal opportunity standards.

(a) *Obligations of sponsors.* Each sponsor of an apprenticeship program shall:

(1) Recruit, select, employ, and train apprentices during their apprenticeship, without discrimination because of race, color, religion, national origin, or sex; and

(2) Uniformly apply rules and regulations concerning apprentices, including but not limited to, equality of wages, periodic advancement, promotion, assignment of work, job performance, rotation among all work processes of the trade, imposition of penalties or other disciplinary action, and all other aspects of the apprenticeship program administration by the program sponsor; and

(3) Take affirmative action to provide equal opportunity in apprenticeship, including adoption of an affirmative action plan as required by this part.

(b) *Equal opportunity pledge.* Each sponsor of an apprenticeship program shall include in its standards the following equal opportunity pledge:

The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be without discrimination because of race, color, religion, national origin, or sex. The sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations, Part 30.

(c) *Programs presently registered.* Each sponsor of a program registered with the Department as of the effective date of this part shall within 9 months following that effective date take the following action:

(1) Include in the standards of its apprenticeship program the equal opportunity pledge prescribed by paragraph (b) of this section; and,

(2) Adopt an affirmative action plan required by § 30.4; and

(3) Adopt a selection procedure required by § 30.5. A

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sponsor adopting a selection method under § 30.5(b)(1), (2), or (3) shall prepare, and have available for submission upon request, copies of its amended standards, affirmative action plans, and selection procedure. A sponsor adopting a selection method under § 30.5(b)(4) shall submit to the Department copies of its standards, affirmative action plan and selection procedure in accordance with the requirements of § 30.5(b)(4)(i)(a).

(d) *Sponsors seeking new registration.* A sponsor of a program seeking new registration with the Department shall submit copies of its proposed standards, affirmative action plan, selection procedures, and such other information as may be required. The program shall be registered if such standards, affirmative action plan, and selection procedure meet the requirements of this part.

(e) *Programs subject to approved equal employment opportunity plans.* A sponsor shall not be required to adopt an affirmative action plan under § 30.4 or a selection procedure under § 30.5 if it submits to the Department satisfactory evidence that it is subject to an equal employment opportunity program providing for the selection of apprentices and for affirmative action in apprenticeship which has been approved as meeting the requirements of title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000e et seq.) or Executive Order 11246, as amended (30 F.R. 12319, 32 F.R. 14303, 34 F.R. 12986) and the implementing regulations published in Title 29 of the Code of Federal Regulations, Chapter XIV, and Title 41 of the Code of Federal Regulations, Chapter 60.

(f) *Program with fewer than five apprentices.* A sponsor of a program in which fewer than five apprentices are indentured shall not be required to adopt an affirmative action plan under § 30.4 or a selection procedure under § 30.5.

§ 30.4 Affirmative action plans.

(a) *Adoption of affirmative action plans.* A sponsor's commitment to equal opportunity in recruitment, selection, employment, and training of apprentices shall include the adoption of a written affirmative action plan.

(b) *Definition of affirmative action.* Affirmative action is not mere passive nondiscrimination. It includes procedures, methods and program for the identification, positive recruitment, training, and motivation of present and potential minority group apprentices. It is action which will equalize opportunity in apprenticeship so as to allow full utilization of minority group manpower potential. The overall result to be sought is equal opportunity in apprenticeship for all individuals participating in or seeking entrance to the Nation's labor force.

(c) *Outreach and positive recruitment.* An acceptable affirmative action plan must also include adequate provision for outreach and positive recruitment that would reasonably be expected to increase minority participation in apprenticeship by expanding the opportunity of minority persons to become eligible for apprenticeship selection. In order to achieve these objectives, sponsors shall undertake activities such as those listed below. It is not contemplated that each sponsor necessarily will include all of the listed activities in its affirmative action program. The scope of the affirmative action program will depend on all the circumstances including the size and type of the program and its resources. However, the sponsor will be required to undertake a significant number of appropriate activities in order to enable it to meet its obligations under this part. The affirmative action plan shall set forth the specific steps the sponsor intends to take in the areas listed below. Whenever special circumstances warrant, the Depart-

ment may provide such financial or other assistance as it deems necessary to implement the requirements of this paragraph.

(1) Dissemination of information concerning the nature of apprenticeship, availability of apprenticeship opportunities, sources of apprenticeship applications, and the equal opportunity policy of the sponsor. For programs accepting applications only at specified intervals, such information shall be disseminated at least 30 days in advance of the earliest date for application at each interval. For programs customarily receiving applications throughout the year, such information shall be regularly disseminated but not less than semiannually. Such information shall be given to the Department, local schools, employment service offices, community organizations which can effectively reach minority groups, and published in newspapers which are circulated in the minority community as well as the general areas in which the program sponsor operates.

(2) Participate in annual workshops conducted by employment service agencies for the purpose of familiarizing school, employment service and other appropriate personnel with the apprenticeship system and current opportunities therein.

(3) Cooperation with local school boards and vocational education systems to develop programs for preparing students to meet the standards and criteria required to qualify for entry into apprenticeship programs.

(4) Internal communication of the sponsor's equal opportunity policy in such a manner as to foster understanding, acceptance, and support among the sponsor's various officers, supervisors, employees, and members and to encourage such persons to take the necessary action to aid the sponsor in meeting its obligations under this part.

(5) Engaging in programs such as outreach for the positive recruitment and preparation of potential apprentices for apprenticeships; where appropriate and feasible, such programs shall provide for pretesting experience and training. If no such programs are in existence, the sponsor shall seek to initiate these programs, or, when available, to obtain financial assistance from the Department. In initiating and conducting these programs, the sponsor may be required to work with other sponsors and appropriate community organizations.

(6) To encourage the establishment and utilization of programs of preapprenticeship, preparatory trade training, or others designed to afford related work experience or to prepare candidates for apprenticeship, a sponsor shall make appropriate provision in its affirmative action plan to assure that those who complete such programs are afforded full and equal opportunity for admission into the apprenticeship program.

(7) Utilization of journeymen to assist in the implementation of the sponsor's affirmative action program.

(8) Granting advance standing or credit on the basis of previously acquired experience, training, skills, or aptitude for all applicants equally.

(9) Admitting to apprenticeship persons whose age exceeds the maximum age for admission to the program, where such action is necessary to assist the sponsor in achieving its affirmative action obligations.

(10) Such other action as to insure that the recruitment, selection, employment, and training of apprentices during apprenticeship, shall be without discrimination because of race, color, religion, national origin, or sex; such as: General publication of apprenticeship opportunities and advantages in advertisements, industry reports, articles, etc.; use of present minority apprentices and journeymen as recruiters; career counseling; periodic auditing of affirmative action programs and activities; and development of reasonable

procedures between the sponsor and employers of apprentices to insure that equal employment opportunity is being granted including reporting systems, on site reviews, briefing sessions, etc. The affirmative action program shall set forth the specific steps the program under this paragraph (c) sponsors intend to take, in the above areas. Whenever special circumstances warrant the Department may provide such financial or other assistance as it deems necessary to implement the above requirements.

(d) *Goals and timetables.* (1) A sponsor adopting a selection method under § 30.5(b) (1) or (2) which determines on the basis of the analysis described in paragraph (e) of this section that it has deficiencies in terms of underutilization of minorities in the craft or crafts represented by the program shall include in its affirmative action plan percentage goals and timetables for the admission of minority applicants into the eligibility pool.

(2) A sponsor adopting a selection method under § 30.5(b) (3) or (4) which determines on the basis of the analysis described in paragraph (e) of this section that it has deficiencies in terms of the underutilization of minorities in the craft or crafts represented by the program shall include in its affirmative action plan percentage goals and timetables for the selection of minority applicants for the apprenticeship program.

(3) "Underutilization" as used in this paragraph refers to the situation where there are fewer minorities in the particular craft or crafts represented by the program than would reasonably be expected in view of an analysis of the specific factors in subparagraphs (1) through (5) in paragraph (e) of this section. Where, on the basis of the analysis, the sponsor determines that it has no deficiencies, no goals and timetables need be established. However, where no goals and timetables are established, the affirmative action plan shall include a detailed explanation why no goals and timetables have been established.

(4) Where the sponsor fails to submit goals and timetables as part of its affirmative action plan or submits goals and timetables which are unacceptable, and the Department determines that the sponsor has deficiencies in terms of underutilization of minorities within the meaning of this section, the Department shall establish goals and timetables applicable to the sponsor for the admission of minority applicants into the eligibility pool or selection of apprentices, as appropriate. The sponsor shall make good faith efforts to attain these goals and timetables in accordance with the requirements of this section.

(e) *Analysis to determine if deficiencies exist.* The sponsor's determination as to whether goals and timetables shall be established, shall be based on an analysis of at least the following factors, which analysis shall be set forth in writing as part of the affirmative action plan.

(1) The minority population of the labor market area in which the program sponsor operates;

(2) The size of the minority labor force in the program sponsor's labor market area;

(3) The percentage of minority participation as apprentices in the particular craft as compared with the percentage of minorities in the labor force in the program sponsor's labor market area;

(4) The percentage of minority participation as journeymen employed by the employer or employers participating in the program as compared with the percentage of minorities in the sponsor's labor market area and the extent to which the sponsor should be expected to correct any deficiencies through the achievement of goals and timetables for the selection of apprentices.

(5) The general availability of minorities with present or

potential capacity for apprenticeship in the program sponsor's labor market area.

(f) *Establishment and attainment of goals and timetables.* The goals and timetables shall be established on the basis of the sponsor's analysis of its underutilization of minorities and its entire affirmative action program. In establishing the goals, the sponsor should consider the results which could be reasonably expected from its good faith efforts to make its overall affirmative action program work. Compliance with these requirements shall be determined by whether the sponsor has met its goals within its timetable, or failing that, whether it has made good faith efforts to meet its goals and timetables. Its "good faith efforts" shall be judged by whether it is following its affirmative action program and attempting to make it work, including evaluation and changes in its program where necessary to obtain the maximum effectiveness toward the attainment of its goals.

(g) *Data and information.* The Secretary of Labor, or a person or agency designated by him, shall make available to program sponsors data and information on minority population and labor force characteristics for each Standard Metropolitan Statistical Area, and for other special areas as appropriate.

§ 30.5 Selection of apprentices.

(a) *Obligations of sponsors.* In addition to the development of a written affirmative action plan to insure that minorities have an equal opportunity for selection as apprentices and otherwise insure the prompt achievement of full and equal opportunity in apprenticeship, each sponsor shall further provide in its affirmative action program that the selection of apprentices shall be made under one of the methods specified in the following subparagraphs (1) through (4) of paragraph (b) of this section.

(b) *Selection methods.* The sponsor shall adopt one of the following methods for selecting apprentices:

(i) *Selection on basis of rank from pool of eligible applicants-(i) Selection.* A sponsor may select apprentices from a pool of eligible applicants created in accordance with the requirements of subdivision (iii) of this subparagraph on the basis of the rank order of scores of applicants on one or more qualification standards where there is a significant statistical and practical relationship between rank order of scores and performance in the apprenticeship program. In demonstrating such relationship, the sponsor shall follow the procedures set forth in the Department of Labor Order of September 9, 1968 (33 F.R. 14392, Sept. 24, 1968), covering the validation of employment tests of contractors and subcontractors subject to the provision of Executive Order 11246, as amended.

(ii) *Requirements.* The sponsor adopting this method of selecting apprentices shall meet the requirements of subdivisions (ii) through (vii) of this subparagraph.

(iii) *Creation of pool of eligibles.* A pool of eligibles shall be created from applicants who meet the qualifications of minimum legal working age and the sponsor's minimum physical requirements; or from applicants who meet qualification standards in addition to minimum legal working age and the sponsor's minimum physical requirements: *Provided*, That any additional qualification standards conform with the following requirements:

(a) *Qualification standards.* The qualification standards, and the procedures for determining such qualification standards, shall be stated in detail and shall provide criteria for the specific factors and attributes to be considered in evaluating applicants for admission to the pool. The score

required under each qualification standard for admission to the pool shall also be specified. All qualification standards, and the score required on any standard for admission to the pool, shall be directly related to job performance, as shown by a significant statistical and practical relationship between the score on the standards, and the score required for admission to the pool, and performance in the apprenticeship program. In demonstrating such relationships, the sponsor shall follow the procedures set forth in the Department's testing order of September 9, 1968. Qualifications shall be considered as separately required so that the failure of an applicant to attain the specified score under a single qualification standard shall disqualify the applicant from admission to the pool.

(b) *Aptitude tests.* Any qualification standard for admission to the pool consisting of aptitude test scores shall be directly related to job performance, as shown by significant statistical and practical relationships between the score on the aptitude tests, and the score required for admission to the pool, and performance in the apprenticeship program. In determining such relationships, the sponsor shall follow the procedures set forth in the Department's testing order of September 9, 1968. The requirements of this item (b) shall also be applicable to aptitude tests utilized by a program sponsor which are administered by a State employment service agency, a private employment agency, or another person, agency, or organization engaged in the selection or evaluation of personnel. A national test developed and administered by a national joint apprenticeship committee will not be approved by the Department unless such test meets the requirements of this subsection.

(c) *Educational attainments.* All educational attainments or achievements as qualifications for admission to the pool shall be directly related to job performance, as shown by a significant statistical and practical relationship between the score, and the score required for admission to the pool, and performance in the apprenticeship program. In demonstrating such relationships, the sponsor shall meet the requirements of the Department's testing order of September 9, 1968. School records or the results of general education development tests recognized by the State or local public instruction authority shall be evidence of educational achievement. Education requirements shall be applied uniformly to all applicants.

(iv) *Oral interviews.* Oral interviews shall not be used as a qualifications standard for admission into an eligibility pool. However, once an applicant is placed in the eligibility pool, and before he is selected for apprenticeship from the pool, he may be required to submit to an oral interview. Oral interviews shall be limited only to such objective questions as may be required to determine the fitness of applicants to enter the apprenticeship program, but shall not include questions relating to qualifications previously determined in gaining entrance to the eligibility pool. When an oral interview is used, each interviewer shall record his questions, the general nature of answers, and shall prepare a summary of any conclusions. Applicants rejected from the pool of eligibles on the basis of an oral interview shall be given a written statement of such rejection, the reasons therefor, and the appeal rights available to the applicant.

(v) *Notification of applicants.* All applicants who meet the requirements for admission shall be notified and placed in the eligibility pool. The program sponsor shall give each rejected applicant notice of his rejection including the reasons for his rejection, the requirements for admission to the pool of eligibles, and the appeal rights available to the applicant.

(vi) *Goals and timetables.* The sponsor shall establish,

where required by § 30.4 (d), percentage goals and timetables for the admission of minority persons into the pool of eligibles, in accordance with the provisions of § 30.4 (d), (e), and (f).

(vii) *Compliance.* A sponsor shall be deemed to be in compliance with its commitments under subdivision (vi) of this subparagraph if it meets its goals or timetables or if it makes a good faith effort to meet these goals and timetables. In the event of the failure of the sponsor to meet its goals and timetables, it shall be given an opportunity to demonstrate that it has made every "good faith effort" to meet its commitments (see § 30.4(f)). All the actions of the sponsor shall be reviewed and evaluated in determining whether such good faith efforts have been made.

(2) *Random selection from pool of eligible applicants-*

(i) *Selection.* A sponsor may select apprentices from a pool of eligible applicants on a random basis. The method of random selection is subject to approval by the Department. Supervision of the random selection process shall be by an impartial person or persons selected by the sponsor, but not associated with the administration of the apprenticeship program. The time and place of the selection, and the number of apprentices to be selected, shall be announced. The place of the selection shall be open to all applicants and the public. The names of apprentices drawn by this method shall be posted immediately following the selection at the program sponsor's place of business.

(ii) The sponsor adopting this method of selecting apprentices shall meet the requirements of subdivisions (i) through (v) of subparagraph (1) of this paragraph relating to the creation of pool of eligibles, oral interviews, and notification of applicants.

(iii) *Goals and timetables.* The sponsor shall establish, where required by § 30.4 (d), percentage goals and timetables for the admission of minority persons into the pool of eligibles in accordance with the provisions of § 30.4 (d), (e), and (f).

(iv) *Compliance.* Determinations as to the sponsor's compliance with its obligations under these regulations shall be in accordance with the provisions of subdivision (vii) of subparagraph (1) of this paragraph (b).

(3) *Selection from pool of current employees-*

(i) *Selection.* A sponsor may select apprentices from an eligibility pool of the workers already employed by the program sponsor in a manner prescribed by a collective bargaining agreement where such exists, or by the sponsor's established promotion policy. The sponsor adopting this method of selecting apprentices shall establish goals and timetables for the selection of minority apprentices, unless the sponsor concludes, in accordance with the provisions of § 30.4 (d), (e), and (f) that it does not have deficiencies in terms of underutilization of minorities in the apprenticeship of journeymen crafts represented by the program.

(ii) *Compliance.* Determinations as to the sponsor's compliance with its obligations under these regulations shall be in accordance with the provisions of subdivision (vii) of subparagraph (1) of this paragraph (b).

(4) *Alternative selection methods-*

(i) *Selection.* A sponsor may select apprentices by means of any other method, including its present selection method: *Provided*, That the sponsor meets the following requirements:

(a) *Selection method and goals and timetables.* Within 6 months of the effective date of this part, the sponsor shall submit to the Department a detailed statement of the selection method it proposes to use along with the rest of its written affirmative action program including, where

required by § 30.4 (d), its percentage goals and timetables for the selection of minority applicants for apprenticeship and its written analysis, upon which such goals and timetables, or lack therof, are based. The establishment of goals and timetables shall be in accordance with the provisions of § 30.4 (d), (e), and (f). The sponsor may not implement any such selection method until the Department has approved the selection method as meeting the requirements of item (b) of this subdivision and has approved the remainder of its affirmative action program including its goals and timetables. If the Department fails to act upon the selection method and the affirmative action program within 30 days of its submission, the sponsor may implement the selection method on the effective date of this part.

(b) *Qualification standards.* Apprentices shall be selected on the basis of objective and specific qualification standards. Examples of such standards as fair aptitude tests, school diplomas, age requirements, occupationally essential physical requirements, fair interviews, school grades, and previous work experience. Where interviews are used, adequate records shall be kept including a brief summary of each interview and the conclusions on each of the specific factors, e.g., motivation, ambition, and willingness to accept direction which are part of the total judgment.

(ii) *Compliance.* Determination as to the sponsor's compliance with its obligations under these regulations shall be in accordance with the provisions of subdivision (vii) of subparagraph (1) of this paragraph (b). Where a sponsor, despite its good faith efforts, fails to meet its goals and timetables within a reasonable period of time, the sponsor may be required to make appropriate changes in its affirmative action program to the extent necessary to obtain maximum effectiveness towards the attainment of its goals. The sponsor may also be required to develop and adopt an alternative selection method, including a method prescribed by the Department, where it is determined that the failure of the sponsor to meet its goals is attributable in substantial part to the selection method. Where the sponsor's failure to meet its goals is attributable in substantial part to its use of a qualification standard which has adversely affected the opportunities of minority persons for apprenticeship, the sponsor may be required to demonstrate that such qualification standard is directly related to job performance, in accordance with the provisions of subparagraph (1)(ii)(a) of this paragraph.

§ 30.6 Existing lists of eligibles and public notice.

A sponsor adopting a selection method under § 30.5(b) (1) or (2), and a sponsor adopting a selection method under § 30.5(b)(4) who determines that there are fewer minorities on its existing lists of eligibles than would reasonably be expected in view of the analysis described in § 30.4(e) shall discard all existing eligibility lists upon adoption of the selection methods required by this part. New eligibility pools shall be established and lists of eligibility pools shall be posted at the sponsor's place of business. Sponsors shall establish a reasonable period of not less than 2 weeks for accepting applications for admission to an apprenticeship program. There shall be at least 30 days of public notice in advance of the earliest date for application for admission to the apprenticeship program (see § 30.4(c) on affirmative action with respect to dissemination of information). Applicants who have been placed in a pool of eligibles shall be retained on lists of eligibles subject to selection for a period of 2 years. Applicants may be removed from the list at an earlier date by their request or following their failure to respond to an apprentice job opportunity given by

registered return receipt mail notice. Applicants who have been accepted in the program shall be afforded a reasonable period of time in light of the customs and practices of the industry for reporting for work. All applicants shall be treated equally in determining such period of time. It shall be the responsibility of the applicant to keep the sponsor informed of his current mailing address. A sponsor may restore to the list of eligibles an applicant who has been removed from the list at his request or who has failed to respond to an apprenticeship job opportunity.

§ 30.7 [Reserved]

§ 30.8 Records.

(a) *Obligations of sponsors.* Each sponsor shall keep adequate records including a summary of the qualifications of each applicant, the basis for evaluation and for selection or rejection of each applicant, the records pertaining to interviews of applicants, the original application for each applicant, information relative to the operation of the apprenticeship program, including but not limited to job assignment, promotion, demotion, layoff, or termination, rates of pay, or other forms of compensation or conditions of work, and any other records pertinent to a determination of compliance with these regulations, as may be required by the Department. The records pertaining to individual applicants, whether selected or rejected shall be maintained in such manner as to permit identification of minority participants.

(b) *Affirmative action plans.* Each sponsor must retain a statement of its affirmative action plan required by § 30.4 for the prompt achievement of full and equal opportunity in apprenticeship, including all data and analyses made pursuant to the requirements of § 30.4. Sponsors shall periodically review their affirmative action plan and update it where necessary.

(c) *Qualification standards.* Each sponsor must maintain evidence that its qualification standards have been reviewed in accordance with the requirements set forth in § 30.5(b).

(d) *Records of State Apprenticeship Councils.* State Apprenticeship Councils shall keep adequate records, including registration requirements, individual program standards and registration records, program compliance reviews and investigations, and any other records pertinent to a determination of compliance with this part, as may be required by the Department, and shall report to the Department as may be required by the Department.

(e) *Maintenance of records.* The records required by this part and any other information relevant to compliance with these regulations shall be maintained for 5 years and made available upon request to the Department or other authorized representative.

§ 30.9 Compliance reviews.

(a) *Conduct of compliance reviews.* The Department will regularly conduct systematic reviews of apprenticeship programs in order to determine the extent to which sponsors are complying with these regulations and will also conduct compliance reviews when circumstances, including receipt of complaints not referred to a private review body pursuant to § 30.11(b)(1)(i), so warrant, and take appropriate action regarding programs which are not in compliance with the requirements of this part. Compliance reviews will consist of comprehensive analyses and evaluations of each aspect of the apprenticeship program, including on-site investigations and audits.

(b) *Reregistration.* Sponsors seeking reregistration shall be subject to a compliance review as described in paragraph

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(a) of this section by the Department as part of the re-registration process.

(c) *New registrations.* Sponsors seeking new registration shall be subject to a compliance review as described in paragraph (a) of this section by the Department as part of the registration process.

(d) *Voluntary compliance.* Where the compliance review indicates that the sponsor is not operating in accordance with this part, the Department shall notify the sponsor in writing of the results of the review and make a reasonable effort to secure voluntary compliance on the part of the program sponsor within a reasonable time before undertaking sanctions under § 30.13. In the case of sponsors seeking new registration, the Department will provide appropriate recommendations to the sponsor to enable it to achieve compliance for registration purposes.

§ 30.10 Noncompliance with Federal and State equal opportunity requirements.

A pattern or practice of noncompliance by a sponsor (or where the sponsor is a joint apprenticeship committee, by one of the parties represented on such committee) with Federal or State laws or regulations requiring equal opportunity may be grounds for the imposition of sanctions in accordance with § 30.13 if such noncompliance is related to the equal employment opportunity of apprentices and/or graduates of such an apprenticeship program under this part. The sponsor shall take affirmative steps to assist and cooperate with employers and unions in fulfilling their equal employment opportunity obligations.

§ 30.11 Complaint procedure.

(a) *Filing.* (1) Any apprentice or applicant for apprenticeship who believes that he has been discriminated against on the basis of race, color, religion, national origin, or sex with regard to apprenticeship or that the equal opportunity standards with respect to his selection have not been followed in the operation of an apprenticeship program may, by himself or by an authorized representative, file a complaint with the Department, or with a private review body established pursuant to subparagraph (3) of this paragraph. The complaint shall be in writing and shall be signed by the complainant. It must include the name, address, and telephone number of the person allegedly discriminated against, the program sponsor involved, and a brief description of the circumstances of the failure to apply the equal opportunity standards provided for in this part.

(2) The complaint must be filed not later than 90 days from the date of the alleged discrimination of specified failure to follow the equal opportunity standards; and, in the case of complaints filed directly with review bodies designated by program sponsors to review such complaints, any referral of such complaints by the complainant to the Department must occur within the time limitation stated above or 30 days from the final decision of such review body, whichever is later. The time may be extended by the Department for good cause shown.

(3) Sponsors are encouraged to establish fair, speedy, and effective procedures for a review body to consider complaints of failure to follow the equal opportunity standards. A private review body established by the program sponsor for this purpose should number three or more responsible persons from the community serving in this capacity without compensation. Members of the review body should not be directly associated with the administration of an apprenticeship program. Sponsors may join together in establishing a review body to serve the needs of programs within the community.

(b) *Processing of complaints.* (1)(i) When the sponsor has designated a review body for reviewing complaints, and if the Department determines that such review body will effectively enforce the equal opportunity standards, the Department, upon receiving a complaint, shall refer the complaint to the review body.

(ii) The Department shall, within 30 days following the referral of a complaint to the review body, obtain reports from the complainant and the review body as to the disposition of the complaint. If the complaint has been satisfactorily adjusted and there is no other indication of failure to apply equal opportunity standards, the case shall be closed and the parties appropriately informed.

(iii) When a complaint has not been resolved by the review body within 90 days or where, despite satisfactory resolution of the particular complaint by the review body, there is evidence that equal opportunity practices of the apprenticeship program are not in accordance with this part, the Department may conduct such compliance review as found necessary, and will take all necessary steps to resolve the complaint.

(2) Where no review body exists, the Department may conduct such compliance review as found necessary in order to determine the facts of the complaint, and obtain such other information relating to compliance with these regulations as the circumstances warrant.

§ 30.12 Adjustments in schedule for compliance review of complaint processing.

If, in the judgment of the Department, a particular situation warrants and requires special processing and either expedited or extended determination, it shall take the steps necessary to permit such determination if it finds that no person or party affected by such determination will be prejudiced by such special processing.

§ 30.13 Sanctions.

(a) Where the Department, as a result of a compliance review or other reason, determines that there is reasonable cause to believe that an apprenticeship program is not operating in accordance with this part and voluntary corrective action has not been taken by the program sponsor, the Department shall institute proceedings to deregister the program or it shall refer the matter to the Attorney General with recommendations for the institution of a court action by the Attorney General under title VII of the Civil Rights Act of 1964.

(b) Deregistration proceedings shall be conducted in accordance with the following procedures:

(1) The Department shall notify the sponsor, in writing, that a determination of reasonable cause has been made under paragraph (a) of this section and that the apprenticeship program may be deregistered unless, within 15 days of the receipt of the notice, the sponsor requests a hearing. The notification shall specify the facts on which the determination is based.

(2) If within 15 days of the receipt of the notice provided for in subparagraph (1) of this paragraph the sponsor mails a request for a hearing, the Secretary shall convene a hearing in accordance with § 30.16.

(3) The Secretary shall make a final decision on the basis of the record before him, which shall consist of the compliance review file and other evidence presented and, if a hearing was conducted pursuant to § 30.16, the proposed findings and recommended decision of the hearing officer. In his discretion, the Secretary may allow the sponsor a reasonable time to achieve voluntary corrective action. If the Secretary's decision is that the apprenticeship

program is not operating in accordance with this part, the apprenticeship program shall be deregistered. In each case in which deregistration is ordered, the Secretary shall make public notice of the order and shall notify the sponsor and the complainant, if any.

§ 30.14 Reinstatement of program registration.

Any apprenticeship program deregistered pursuant to this part may be reinstated upon presentation of adequate evidence to the Secretary that the apprenticeship program is operating in accordance with this part.

§ 30.15 State Apprenticeship Councils.

(a) *Adoption of consistent State plans.* (1) The Department shall encourage State Apprenticeship Councils to adopt and implement the requirements of this part.

(2) Each State Apprenticeship Council which, prior to the effective date of this part had in operation a State equal opportunity plan, shall submit a new State plan within 6 months from the effective date of this part. Such new State plan shall, as a prerequisite to approval by the Department, adopt and implement the requirements of this part. The new State plan shall also require all State apprenticeship programs registered with the State Apprenticeship Council to comply with the requirements of the new State plan within 1 year after the effective date of this part. No State Apprenticeship Council shall continue to be recognized by the Department if it has not adopted within 6 months after the effective date of this part a plan implementing the requirements of this part.

(3) The Department retains authority to conduct compliance reviews to determine whether the State plan or any State apprenticeship program registered with a State Apprenticeship Council is being administered or operated in accordance with this part.

(4) It shall be the responsibility of the State Apprenticeship Council to take the necessary action to bring a noncomplying program into compliance with the State plan. In the event the State Apprenticeship Council fails to fulfill this responsibility, the Secretary may withdraw the recognition for Federal purposes of any or all State apprenticeship programs, in accordance with the procedures for deregistration of programs registered by the Department, or refer the matter to the Attorney General with a recommendation for the institution by the Attorney General of a court action under title VII of the Civil Rights Act of 1964.

(5) Each State Apprenticeship Council shall notify the Department of any State apprenticeship program deregistered by it.

(6) Any State apprenticeship program deregistered by a State Apprenticeship Council for noncompliance with requirements of this part may, within 15 days of the receipt of a notice of deregistration, appeal to the Department to set aside the determination of the State Apprenticeship Council. The Department shall make its determination on the basis of the record. The Department may grant the State program sponsor, the State Apprenticeship Council and the complainant(s), if any, the opportunity to present oral or written argument.

(b) *Withdrawal of recognition.* (1) Whenever the Department determines that reasonable cause exists to believe that a State Apprenticeship Council has not adopted or implemented a plan in accordance with the equal opportunity requirements of this part, it shall give notice to such State Apprenticeship Council and to appropriate State sponsors of this determination, stating specifically wherein the State's plan fails to meet such requirements and that the Department proposes to withdraw recognition for Federal

purposes, from the State Apprenticeship Council unless within 15 days of the receipt of the notice, the State Apprenticeship Council complies with the provisions of this part or mails a request for a hearing to the Secretary.

(2) If within 15 days of the receipt of the notice provided for in subparagraph (1) of this paragraph the State Apprenticeship Council neither complies with the provisions of this part, nor mails a request for a hearing, the Secretary shall determine whether the State Apprenticeship Council has adopted or implemented a plan in accordance with the equal opportunity requirements of this part.

(3) If within 15 days of the receipt of the notice provided for in subparagraph (1) of this paragraph the State Apprenticeship Council mails a request for a hearing, the Secretary shall proceed in accordance with § 30.16.

(4) If a hearing is conducted in accordance with § 30.16, the Secretary upon receipt of the proposed findings and recommended decision of the hearing officer shall make a final decision whether the State Apprenticeship Council has adopted or implemented a plan in accordance with the equal opportunity requirements of this part.

(5) If the Secretary determines to withdraw recognition, for Federal purposes, from the State Apprenticeship Council he shall notify the State Apprenticeship Council of this determination. He shall also notify the State sponsors that within 30 days of the receipt of the notice the Department shall cease to recognize, for Federal purposes, each State apprenticeship program unless the State program sponsor requests registration with the Department. Such registration may be granted contingent upon finding that the State apprenticeship program is operating in accordance with the requirements of this part.

(6) A State Apprenticeship Council whose recognition has been withdrawn pursuant to this part may have its recognition reinstated upon presentation of adequate evidence to the Secretary that it has adopted and implemented a plan carrying out the equal opportunity requirements of this part.

§ 30.16 Hearings.

(a) Within 10 days of his receipt of a request for a hearing, the Secretary shall designate a hearing officer. The hearing officer shall give reasonable notice of such hearing by registered mail, return receipt requested, to the appropriate sponsor (Federal or State registered), the State Apprenticeship Council, or both, as the case may be. Such notice shall include (1) a reasonable time and place of hearing, (2) a statement of the provisions of this part pursuant to which the hearing is to be held, and (3) a concise statement of the matters pursuant to which the action forming the basis of the hearing is proposed to be taken.

(b) The hearing officer shall regulate the course of the hearing. Hearings shall be informally conducted. Every party shall have the right to counsel, and a fair opportunity to present his case including such cross-examination as may be appropriate in the circumstances. Hearing officers shall make their proposed findings and recommended decisions to the Secretary upon the basis of the record before them.

§ 30.17 Intimidatory or retaliatory acts.

Any intimidation, threat, coercion, or retaliation by or with the approval of any sponsor against any person for the purpose of interfering with any right or privilege secured by title VII of the Civil Rights Act of 1964, Executive Order 11246 of September 24, 1965, or because he has made a complaint, testified, assisted, or participated in any manner

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in an investigation proceeding, or hearing under this part shall be considered noncompliance with the equal opportunity standards of this part. The identity of complainants shall be kept confidential except to the extent necessary to carry out the purposes of this part, including the conduct of any investigation, hearing or judicial proceeding arising therefrom.

§ 30.18 Nondiscrimination.

The commitments contained in the sponsor's affirmative action program are not intended and shall not be used to

discriminate against any qualified applicant or apprentice on the basis of race, color, religion, national origin, or sex.

§ 30.19 Exemptions.

Requests for exemption from these regulations, or any part thereof, shall be made in writing to the Secretary, and shall contain a statement of reasons supporting the request. Exemptions may be granted for good cause. State Apprenticeship Councils shall notify the Department of any such exemptions granted affecting a substantial number of employers and the reasons therefor.

APPENDIX C

3-12-75 (DLR)

TEXT

(No. 49) E - 1

PROPOSED LABOR DEPARTMENT STANDARDS FOR FEDERAL REGISTRATION OF APPRENTICESHIP PROGRAMS

DEPARTMENT OF LABOR

Office of the Secretary
[29 CFR Part 29]

APPRENTICESHIP PROGRAMS

Proposed Registration Standards

Pursuant to section 1 of the National Apprenticeship Act of 1937 (29 U.S.C. 50), Reorganization Plan No. 14 of 1950 (64 Stat. 1267; 3 CFR 1949-53 Comp., p. 1007), the Copeland Act (40 U.S.C. 276c), and 5 U.S.C. 301, the Department of Labor proposed to amend 29 CFR subtitle A by adding thereto a new Part 29, which was published at 38 FR 13891.

This proposed new part set out labor standards, policies and procedures relating to the registration, cancellation and deregistration of apprenticeship programs and of apprenticeship agreements by the Bureau of Apprenticeship and Training, the recognition of a State agency as the appropriate agency for registering local apprenticeship programs for certain Federal purposes, and the standards for Bureau approval of on-the-job training programs.

The Department invited interested persons to submit written views and comments concerning this proposal and numerous comments were received. The Department studied these comments carefully with a resulting decision to revise the proposed regulations in certain respects. The intended revisions were presented to the Federal Committee on Apprenticeship and the Committee after consideration, has recommended their adoption.

The revisions with a short explanatory statement are as follows:

In § 29.1(b) delete the last sentence, which reads: "Standards for Bureau approval of on-the-job training programs are also set forth." This and all other references to "on-the-job training" and to "trainees" at various places throughout the proposal, including § 29.15 in its entirety, are deleted. These revisions are consistent with the principle of confining the proposed apprenticeship regulations in this part to matters of apprenticeship only.

In § 29.4 delete paragraphs (e), (f), (g), and the second sentence of (e); modify paragraph (d) so that the minimum term of apprenticeship is 2,600 hours of work experience and additional hours of related instruction. These revisions are intended to make less restrictive the criteria for apprenticeship occupations and to encourage the expansion of the apprenticeship system into occupational fields where it has not traditionally been used.

In § 29.5(b) paragraph (2) has been modified to conform to § 29.4(d).

In § 29.5(b) delete paragraph (20) as being impractical as a universal requirement, and unnecessary in view of the protections afforded in § 29.6(h) (1) and (2).

In § 29.6 delete paragraph (k), which pertains to the transfer of apprenticeship agreements in certain cases, as being impractical and imposing an unnecessary burden upon the employer in view of § 29.5(b) (13).

Section 29.12 is rewritten to provide in paragraph (b)(1) for continued recognition of State apprenticeship agencies presently recognized, and in paragraph (b)(2) to provide for public members on State apprenticeship councils and to accommodate existing voting practices by such councils. The present § 29.12(c) is redesignated as (d); a new paragraph (c) is inserted; it provides for the right of appeal and procedures related thereto in case of the denial of the application by a State agency for recognition.

Section 29.14 is deleted in entirety as unnecessary for administrative purposes. Other minor revisions are made for clarity.

Interested persons may submit written views and arguments concerning this revised proposal to the Secretary of Labor, U.S. Department of Labor, Washington, D.C. 20210, on or before April 9, 1975.

The proposed new Part 29 as revised, would read as follows:

PART 29—LABOR STANDARDS FOR THE REGISTRATION OF APPRENTICESHIP PROGRAMS

Sec.

- 29.1 Purpose and scope.
- 29.2 Definitions.
- 29.3 Eligibility and procedure for Bureau registration of a program.
- 29.4 Criteria for apprenticeship occupations.
- 29.5 Standards of apprenticeship.
- 29.6 Apprenticeship agreement.
- 29.7 Deregistration of Bureau-registered program.
- 29.8 Reinforcement of program registration.
- 29.9 Hearings.
- 29.10 Limitations.
- 29.11 Complaints.
- 29.12 Recognition of State agencies.
- 29.13 Deregistration of State agency.

Authority: Sec. 1, 50 Stat. 661, as amended, 29 U.S.C. 50; 40 U.S.C. 276c; 5 U.S.C. 301; Reorganization Plan No. 14 of 1950, 64 Stat. 1267, 5 U.S.C. App. p. 524.

§ 29.1 Purpose and scope.

(a) The National Apprenticeship Act of 1937, section 1, (29 U.S.C. 50) authorizes and directs the Secretary of Labor

to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, to bring together employers and labor for the formulation of programs of apprenticeship, to cooperate with State agencies engaged in the formulation and promotion of standards of apprenticeship, and to cooperate with the Office of Education under the Department of Health, Education, and Welfare. . . .

Section 2 of the Act authorizes the Secretary of Labor to "publish information relating to existing and proposed labor standards of apprenticeship," and to "appoint national advisory committees" (29 U.S.C. 50a).

(b) The purpose of this part is to set forth labor standards to safeguard the welfare of apprentices, and to extend the application of such standards by prescribing policies and procedures concerning the registration, for certain Federal purposes, of acceptable apprenticeship programs with the U.S. Department of

Labor, Manpower Administration, Bureau of Apprenticeship and Training. These labor standards, policies and procedures cover the registration, cancellation and deregistration of apprenticeship programs and of apprenticeship agreements; the recognition of a State agency as the appropriate agency for registering local apprenticeship programs for certain Federal purposes; and matters relating thereto.

§ 29.2 Definitions.

As used in this part:

(a) "Department" shall mean the U.S. Department of Labor.

(b) "Secretary" shall mean the Secretary of Labor or any person specifically designated by him.

(c) "Assistant Secretary" shall mean the Assistant Secretary of Labor for Manpower or any person specifically designated by him.

(d) "Manpower Administrator" shall mean the Deputy Assistant Secretary for Manpower and Manpower Administrator or any person specifically designated by him.

(e) "Bureau" shall mean the Bureau of Apprenticeship and Training, Manpower Administration.

(f) "Administrator" shall mean the Administrator of the Bureau of Apprenticeship and Training, or any person specifically designated by him.

(g) "Apprentice" shall mean a worker at least 16 years of age, except where a higher minimum age standard is otherwise fixed by law, who is employed to learn a skilled trade as defined in § 29.4 under standards of apprenticeship fulfilling the requirements of § 29.5.

(h) "Apprenticeship program" shall mean a plan containing all terms and conditions for the qualification, recruitment, selection, employment and training of apprentices, including such matters as the requirement for a written apprenticeship agreement.

(i) "Registrant" shall mean any person, association, committee, or organization in whose name or title the program is or is to be registered, irrespective of whether such entity is an employer.

(j) "Employer" shall mean any person or organization employing an apprentice whether or not such person or organization is a party to an apprenticeship agreement with the apprentice.

(k) "Apprenticeship agreement" shall mean a written agreement between an apprentice and either his employer, or an apprenticeship committee acting as agent for employer(s), which agreement contains the terms and conditions of the employment and training of the apprentice.

(l) "Joint apprenticeship committee" shall mean a committee composed of an equal number of representatives of employers and employees, which has been established by an employer or group of employers and a bona fide collective bargaining agent or agents to conduct, operate, or administer an apprenticeship program and enter into apprenticeship agreements with apprentices selected for employment under the particular program.

(m) "Non-joint apprenticeship sponsor" shall mean an apprenticeship program sponsor in which a bona fide collective bargaining agent is not a participant, it includes an Individual Non-joint Sponsor (apprenticeship program sponsored by one employer without the participation of a union) and a Group Non-joint Sponsor (apprenticeship program sponsored by 2 or more employers without the participation of a union).

(n) "Federal purposes" includes any Federal contract, grant, agreement or arrangement dealing with apprenticeship; and any Federal financial or other assistance, benefit, privilege, contribution, allowance, exemption, preference or right pertaining to apprenticeship.

(o) "Registration of an apprenticeship program" shall mean the acceptance and recording of such program by the Bureau of Apprenticeship and Training, or by a recognized State Apprenticeship Agency, as meeting the basic standards and requirements of the Department for approval of such program for Federal purposes. Approval is evidenced by a Certificate of Registration or other written indicia.

(p) "Registration of an apprenticeship agreement" shall mean the acceptance and recording thereof by the Bureau or a recognized State Apprenticeship Agency as evidence of the participation of the apprentice in a particular registered apprenticeship program.

(q) "Certification" shall mean written approval by the Bureau of:

(1) A set of apprenticeship standards developed by a national committee or organization, joint or unilateral, for policy or guideline use by local affiliates, as substantially conforming to the standards of apprenticeship set forth in § 29.5; or

(2) An individual as eligible for probationary employment as an apprentice under a registered apprenticeship program.

(r) "Recognized State Apprenticeship Agency" or "recognized State Apprenticeship Council" shall mean an organization approved by the Bureau as an agency or council which has been properly constituted under an acceptable State apprenticeship law, and has been approved by the Bureau as the appropriate body for State registration of local apprenticeship programs and agreements for Federal purposes.

(s) "State" shall mean any of the 50 States of the United States, the District of Columbia, or any territory or possession of the United States.

(t) "Related instruction" shall mean an organized and systematic form of instruction designed to provide the apprentice with knowledge of the theoretical and technical subjects related to his trade.

(u) "Cancellation" shall mean the deregistration of an apprenticeship program at the request of the program sponsor or the termination of an apprenticeship agreement at the request of the apprentice.

§ 29.3 Eligibility and procedure for Bureau registration of a program.

(a) Eligibility for various Federal purposes is conditioned upon a program's

conformity with apprenticeship program standards published by the Secretary of Labor in this part. For a program to be determined by the Secretary of Labor as being in conformity with these published standards the program must be registered with the Bureau or with a State Apprenticeship Agency or council recognized by the Bureau. Such determination by the Secretary is made only by such registration.

(b) No apprenticeship program or agreement shall be eligible for Bureau registration unless (1) it is in conformity with the requirements of this part and the training is in an apprenticesable occupation having the characteristics set forth in § 29.4 herein, and (2) it is in conformity with the requirements of the Department's regulation on "Equal Employment Opportunity in Apprenticeship and Training" set forth in 29 CFR Part 30, as amended.

(c) Except as provided under paragraph (d) of this section, apprentices must be individually registered under a registered program. Such registration may be effected:

(1) By filing copies of each apprenticeship agreement; or

(2) Subject to prior Bureau approval, by filing a master copy of such agreement followed by a listing of the name, and other required data, of each individual when apprenticed.

(d) The names of persons in their first 90 days of probationary employment as an apprentice under an apprenticeship program registered by the Bureau or a recognized State Apprenticeship Agency, if not individually registered under such program, shall be submitted immediately after employment to the Bureau or State Apprenticeship Agency for certification to establish the apprentice as eligible for such probationary employment.

(e) The appropriate registration office must be promptly notified of the cancellation, suspension or termination of any apprenticeship agreement, with cause for same, and of apprenticeship completions.

(f) Approved apprenticeship programs shall be accorded registration, evidenced by a Certificate of Registration. When approved by the Bureau, national apprenticeship standards for policy or guideline use shall be accorded certification, evidenced by a certificate attesting to the Bureau's approval.

(g) Any modification(s) or change(s) to registered or certified programs shall be promptly submitted to the registration office and, if approved, shall be recorded and acknowledged as an amendment to such program.

(h) The request for registration, together with all documents and data required by this part, shall be submitted in three copies.

(i) Under a program proposed for registration by an employer or employers' association, where the standards, collective bargaining agreement or other instrument, provides for participation by a union in any manner in the operation of the substantive matters of the apprenticeship program, and such participation is exercised, written acknowledgement of

union agreement or "no objection" to the registration is required. Where no such participation is evidenced and practiced, the employer or employers' association shall simultaneously furnish to the union local, if any, which is the collective bargaining agent of the employees to be trained, a copy of its application for registration and of the apprenticeship program. In addition, upon receipt of the application and apprenticeship program, the Bureau shall promptly send by certified mail to such union local another copy of the application and of the apprenticeship program together with a notice that union comments will be accepted for 30 days after the date of the Bureau's transmittal.

(j) Where the employees to be trained have no collective bargaining agent, an apprenticeship program may be proposed for registration by an employer or group of employers.

§ 29.4 Criteria for apprenticesable occupation.

An apprenticesable occupation is a skilled trade which possesses all of the following characteristics:

(a) It is customarily learned in a practical way through training and work on the job.

(b) It is clearly identified and commonly recognized throughout an industry.

(c) It involves manual, mechanical or technical skills and knowledge which require a minimum of 2,000 hours of on-the-job work experience.

(d) It requires related instruction to supplement the on-the-job training.

§ 29.5 Standards of apprenticeship.

An apprenticeship program shall conform to the following standards:

(a) The program is an organized, written plan embodying the terms and conditions of employment, training, and supervision of one or more apprentices in an apprenticesable occupation, as defined in this part, and subscribed to by a sponsor who has undertaken to carry out the apprentice training program.

(b) The program standards contain the equal opportunity pledge prescribed in 29 CFR 30.3(b) and, when applicable, an affirmative action plan in accordance with 29 CFR 30.4, a selection method authorized in 29 CFR 30.5, and provisions concerning the following:

(1) The employment and training of the apprentice in a skilled trade;

(2) A term of apprenticeship, not less than 2,000 hours of work experience, consistent with training requirements as established by industry practice;

(3) An outline of the work processes in which the apprentice will receive supervised work experience and training on the job, and the allocation of the approximate time to be spent in each major process;

(4) Provision for organized related and supplemental instruction in technical subjects related to the trade. A minimum of 144 hours for each year of apprenticeship is recommended. Such instruction may be given in a classroom,

through trade, industrial or correspondence courses of equivalent value, or other forms of approved self-study;

(5) A progressively increasing schedule of wages to be paid the apprentice consistent with the skill acquired. The entry wage shall be not less than the minimum wage prescribed by the Fair Labor Standards Act, where applicable, unless a higher wage is required by other applicable Federal law, State law, respective regulations, or by collective bargaining agreement;

(6) Periodic review and evaluation of the apprentice's progress in job performance and related instruction; and the maintenance of appropriate progress records;

(7) The numeric ratio of apprentices to journeymen consistent with proper supervision, training, and continuity of employment, and applicable provisions in collective bargaining agreements;

(8) A probationary period reasonable in relation to the full apprenticeship term, with full credit for such period toward completion of apprenticeship;

(9) Adequate and safe equipment and facilities for training and supervision, and safety training for apprentices on the job and in related instruction;

(10) The required minimum qualifications for persons entering an apprenticeship program, with an eligible starting age not less than 16 years;

(11) The placement of an apprentice under an apprenticeship agreement as required by the State apprenticeship law and regulations, or the Bureau where no such State law or regulation exists. The agreement shall directly, or by reference, incorporate the standards of the program as part of the agreement;

(12) Grant of advanced standing or credit for previously acquired experience, training, skills, or aptitude for all applicants equally, with commensurate wages for any progression step so granted.

(13) Transfer of employer's training obligation to another employer, where warranted, with full credit to the apprentice for satisfactory time and training earned;

(14) Assurance of qualified training personnel;

(15) Recognition for successful completion of apprenticeship evidenced by an appropriate certificate;

(16) Identification of the registration agency;

(17) Provision for the registration, cancellation and deregistration of the program; and requirement for the prompt submission of any modification or amendment thereto;

(18) Provision for registration of apprenticeship agreements, modifications, and amendments; notice to the registration office of persons who have successfully completed apprenticeship programs; and notice of cancellations, suspensions and terminations of apprenticeship agreements and causes therefor;

(19) Authority for the termination of an apprenticeship agreement during the probationary period by either party without stated cause;

(20) A statement that the program will be conducted, operated and administered

in conformity with applicable provisions of 29 CFR Part 30, as amended;

(21) Name and address of the appropriate authority under the program to receive, process and make disposition of complaints;

(22) Recording and maintenance of all records concerning apprenticeship as may be required by the Bureau or recognized State Apprenticeship Agency and other applicable law.

§ 29.6 Apprenticeship agreement.

The apprenticeship agreement shall contain explicitly or by reference:

(a) Names and signatures of the contracting parties (apprentice, and the program registrant or employer), and the signature of a parent or guardian if the apprentice is a minor.

(b) The date of birth of apprentice.

(c) Name and address of the program registrant and registration agency.

(d) A statement of the trade or craft which the apprentice is to be taught, and the beginning date and term (duration) of apprenticeship.

(e) A statement showing (1) the number of hours to be spent by the apprentice in work on the job, and (2) the number of hours to be spent in related and supplemental instruction which is recommended to be not less than 144 hours per year.

(f) A statement setting forth a schedule of the work processes in the trade or industry divisions in which the apprentice is to be taught and the approximate time to be spent at each process.

(g) A statement of the graduated scale of wages to be paid the apprentice and whether or not the required school time shall be compensated.

(h) Statements providing:

(1) For a specific period of probation during which the apprenticeship agreement may be terminated by either party to the agreement upon written notice to the registration agency;

(2) That, after the probationary period, the agreement may be suspended, cancelled, or terminated for good cause, with due notice to the apprentice and a reasonable opportunity for corrective action, and with written notice to the apprentice and to the registration agency of the final action taken.

(i) A reference incorporating as part of the agreement the standards of the apprenticeship program as it exists on the date of the agreement and as it may be amended during the period of the agreement.

(j) A statement that the apprentice will be accorded equal opportunity in all phases of apprenticeship employment and training, without discrimination because of race, color, religion, national origin, or sex.

(k) Name and address of the appropriate authority, if any, designated under the program to receive, process and make disposition of controversies or differences arising out of the apprenticeship agreement when the controversies or differences cannot be adjusted locally or resolved in accordance with the established trade procedure or applicable collective bargaining provisions.

(l) A statement that in the event the registration of the program has been cancelled or revoked, the apprentice will be notified within 15 days of the event.

§ 29.7 Deregistration of Bureau-registered program.

Deregistration of a program may be effected upon the voluntary action of the registrant by a request for cancellation of the registration, or upon reasonable cause, by the Bureau instituting formal deregistration proceedings in accordance with the provisions of this part.

(a) Request by registrant. The registration officer may cancel the registration of an apprenticeship program by a written acknowledgement of such request stating, but not limited to, the following matters:

(1) The registration is canceled at registrant's request, and effective date thereof;

(2) That, within 15 days of the date of the acknowledgement, the registrant shall notify all apprentices of such cancellation and the effective date; that such cancellation automatically deprives the apprentice of his individual registration; and that the deregistration of the program removes the apprentice from coverage for Federal purposes which require the Secretary of Labor's approval of an apprenticeship program.

(b) Formal deregistration.—(1) Reasonable cause. Deregistration proceedings may be undertaken when the apprenticeship program is not conducted, operated, and administered in accordance with the registered provisions or the requirements of this part, except that deregistration proceedings for violation of equal opportunity requirements shall be processed in accordance with the provisions under 29 CFR Part 30, as amended.

(2) Where it appears the program is not being operated in accordance with the registered standards or with requirements of this part, the registration officer shall so notify the program registrant in writing.

(3) The notice shall (i) be sent by registered or certified mail, with return receipt requested; (ii) state the shortcoming(s) and the remedy required; and (iii) state that a determination of reasonable cause for deregistration will be made unless corrective action is effected within 30 days.

(4) Upon request by registrant for good cause, the 30-day term may be extended for another 30 days. During the period for correction, the registrant shall be assisted in every reasonable way to achieve conformity.

(5) If the required correction is not effected within the allotted time, the registration officer shall send a notice to the registrant, by registered or certified mail, return receipt requested, stating the following:

(i) The notice is sent pursuant to this subsection;

(ii) Certain deficiencies (stating them) were called to registrant's attention and remedial measures requested, with dates of such occasions and letters;

and that the registrant has failed or refused to effect correction;

(iii) Based upon the stated deficiencies and failure of remedy, a determination of reasonable cause has been made and the program may be deregistered unless, within 15 days of the receipt of this notice, the registrant requests a hearing;

(iv) If a request for a hearing is not made, the entire matter will be submitted to the Administrator, BAT, for a decision on the record with respect to deregistration;

(6) If the registrant has not requested a hearing, the registration officer shall transmit to the Administrator, BAT, a report containing all pertinent facts and circumstances concerning the nonconformity, including his findings and recommendation for deregistration, and copies of all relevant documents and records. Statements concerning interviews, meetings and conferences shall include the time, date, place, and persons present. The Administrator shall make a final order on the basis of the record before him.

(7) If the registrant requests a hearing, the registration officer shall transmit to the Secretary, through the Administrator, a report containing all the data listed in paragraph (6) above. The Secretary shall convene a hearing in accordance with § 29.9; and shall make a final decision on the basis of the record before him including the proposed findings and recommended decision of the hearing officer.

(8) In his discretion, the Secretary may allow the registrant a reasonable time to achieve voluntary corrective action. If the Secretary's decision is that the apprenticeship program is not operating in accordance with the required provisions or requirements of this part, the apprenticeship program shall be deregistered. In each case in which deregistration is ordered, the Secretary shall make public notice of the order and shall notify the registrant.

(9) Every order of deregistration shall contain a provision that the registrant shall, within 15 days of the effective date of the order, notify all registered apprentices of the deregistration of the program; the effective date thereof; that such cancellation automatically deprives the apprentice of his individual registration; and that the deregistration removes the apprentice from coverage for Federal purposes which require the Secretary of Labor's approval of an apprenticeship program.

§ 29.8 Reinforcement of program registration.

Any apprenticeship program deregistered pursuant to this part may be reinstated upon presentation of adequate evidence that the apprenticeship program is operating in accordance with this part. Such evidence shall be presented to the Administrator, BAT, if the registrant had not requested a hearing, or to the Secretary, if an order of deregistration was entered pursuant to a hearing.

§ 29.9 Hearings.

(a) Within 10 days of his receipt of a request for a hearing, the Secretary shall

designate a hearing officer. The hearing officer shall give reasonable notice of such hearing by registered mail, return receipt requested, to the appropriate sponsor. Such notice shall include (1) a reasonable time and place of hearing, (2) a statement of the provisions of this part pursuant to which the hearing is to be held, and (3) a concise statement of the matter, pursuant to which the action forming the basis of the hearing is proposed to be taken.

(b) The hearing officer shall regulate the course of the hearing. Hearings shall be informally conducted. Every party shall have the right to counsel, and a fair opportunity to present his case, including such cross-examination as may be appropriate in the circumstances. Hearing officers shall make their proposed findings and recommended decisions to the Secretary upon the basis of the record before them.

§ 29.10 Limitation.

Nothing in this part or in any apprenticeship agreement shall operate to invalidate—

(a) Any apprenticeship provision in any collective bargaining agreement between employers and employees setting up higher apprenticeship standards; or

(b) Any special provision for veterans, minority persons or females in the standards, apprentice qualifications or operation of the program, or in the apprenticeship agreement, which is not otherwise prohibited by law, executive order, or authorized regulation.

§ 29.11 Complaints.

(a) This section is not applicable to any complaint concerning discrimination or other equal opportunity matters; all such complaints shall be submitted, processed and resolved in accordance with applicable provisions in 29 CFR Part 30, as amended.

(b) Except for matters described in paragraph (a) of this section, any controversy or difference arising under an apprenticeship agreement which cannot be adjusted locally and which is not covered by a collective bargaining agreement, may be submitted by an apprentice, or his authorized representative, to the registration office for review. The registration office may not review a matter which is covered by a collective bargaining agreement.

(c) The complaint, in writing and signed by the complainant, or authorized representative, shall be submitted within 60 days of the final local decision. It shall set forth the specific matter(s) complained of, together with all relevant facts and circumstances. Copies of all pertinent documents and correspondence shall accompany the complaint.

(d) The registration office shall render an opinion within 90 days after receipt of the complaint, based upon such investigation of the matters submitted as may be found necessary, and the record before it. During the 90-day period, the office shall make reasonable efforts to effect a satisfactory resolution between the parties involved. If so resolved, the parties shall be notified that the case is closed. Where an opinion is rendered,

copies of same shall be sent to all interested parties.

(e) Nothing in this section shall be construed to require an apprentice to use the registration office review procedure set forth in this section.

§ 29.12 Recognition of State agencies.

(a) Recognition of a State Apprenticeship Agency or State Apprenticeship Council (SAC), for Federal purposes, may be accorded by the Bureau upon submission and approval of the following:

(1) An acceptable State apprenticeship law for Executive Order, and regulations adopted pursuant thereto;

(2) Acceptable composition of the State Apprenticeship Council (SAC); and

(3) An acceptable State Plan for Equal Employment Opportunity in Apprenticeship.

(b) *Basic requirements.* Generally, the basic requirements under the matters covered in paragraph (a) of this section shall be in conformity with applicable requirements as set forth in this part. Acceptable State provisions shall:

(1) Establish the apprenticeship agency in (i) the State Department of Labor, or (ii) in that agency of State government having jurisdiction of laws and regulations governing wages, hours and working conditions, or (iii) that State agency presently recognized by the Bureau, with a State official empowered to direct the apprenticeship operation.

(2) Require that the State apprenticeship council be composed of persons familiar with apprenticeship occupations and an equal number of representatives of employer and of employee organizations and may include public members who shall not number in excess of the number named to represent either employer or employee organizations. Each representative so named shall have one vote. Ex officio members may be added to the council but they shall have no vote except where such members have a vote according to the established practice of a presently recognized council. If the State official who directs the apprenticeship operation is a member of the council, provision may be made for him to have a tie-breaking vote.

(3) Clearly delineate the respective powers and duties of the State official and of the council;

(4) Clearly designate the officer or body authorized to register and deregister apprenticeship programs and agreements;

(5) Establish policies and procedures to promote equality of opportunity in apprenticeship programs pursuant to a State Plan for Equal Employment Opportunity in Apprenticeship which adopts and implements the requirements of 29 CFR Part 30, as amended, and to require apprenticeship programs to operate in conformity with such State Plan and 29 CFR Part 30, as amended;

(6) Prescribe the contents of apprenticeship agreements;

(7) Limit the registration of apprenticeship programs to those providing training in "apprenticeable" occupations as defined in § 29.4;

(8) Provide for the cancellation and deregistration of programs, and for the temporary suspension, cancellation, and deregistration of apprenticeship agreements; and

(9) Provide that under a program proposed for registration by an employer or employers' association, and where the standards, collective bargaining agreement or other instrument provides for participation by a union in any manner in the operation of the substantive matters of the apprenticeship program, and such participation is exercised, written acknowledgement of union agreement or "no objection" to the registration is required. Where no such participation is evidenced and practiced, the employer or employers' association shall simultaneously furnish to the union local, if any, which is the collective bargaining agent of the employees to be trained, a copy of its application for registration and of the apprenticeship program. In addition, upon receipt of the application and apprenticeship program, the State agency or council shall promptly send by certified mail to such union local another copy of the application and of the apprenticeship program together with a notice that union comments will be accepted for 30 days after the date of the agency transmittal.

(e) *Appeal from denial of recognition.* The denial by the Administrator of a State agency's application for recognition under this part shall be in writing and shall set forth the reasons for the denial. The notice of denial shall be sent to the applicant by certified mail, return receipt requested. The applicant may appeal such a denial to the Secretary by mailing or otherwise furnishing to the Administrator, within 30 days of receipt of the denial, a notice of appeal addressed to the Secretary and setting forth the following items:

(1) A statement that the applicant appeals to the Secretary to reverse the Administrator's decision to deny its application.

(2) The date of the Administrator's decision and the date the applicant received the decision.

(3) A summary of the reasons why the applicant believes that the Administrator's decision was incorrect.

(4) A copy of the application for recognition and subsequent modifications, if any.

(5) A copy of the Administrator's decision of denial. Within 10 days of receipt of a notice of appeal, the Secretary shall assign an Administrative Law Judge to conduct hearings and to recommend findings of fact and conclusions of law. The proceedings shall be informal, witnesses shall be sworn, and the parties shall have the right to counsel and of cross-examination.

He shall submit them, together with the entire record to the Secretary for final decision. The Secretary shall make his final decision in writing within 30 days of the Administrative Law Judge's submission. The Secretary may make a decision granting recognition conditional

upon the performance of one or more actions by the applicant. In the event of such a conditional decision, recognition shall not be effective until the applicant has submitted to the Secretary evidence that the required actions have been performed and the Secretary has communicated to the applicant in writing that he is satisfied with the evidence submitted.

(d) *State apprenticeship programs.* (1) An apprenticeship program submitted for registration with a State Apprenticeship Agency recognized by the Bureau shall, for Federal purposes, be in conformity with the State apprenticeship law, regulations, and with the State equal opportunity plan in apprenticeship as submitted to and approved by the Bureau pursuant to 29 CFR 30.15, as amended;

(2) In the event that a State Apprenticeship Agency is not recognized by the Bureau for Federal purposes, or that such recognition has been withdrawn, or if no State Apprenticeship Agency exists, registration with the Bureau may be requested. Such registration shall be granted if the program is conducted, administered and operated in accordance with the requirements of this part and the equal opportunity regulation in 29 CFR Part 30, as amended.

§ 29.13 Derecognition of State agency.

The recognition for Federal purposes of a State Apprenticeship Agency or State Apprenticeship Council, (hereinafter designated "respondent"), may be withdrawn for the failure to fulfill, or operate in conformity with, the requirements of this part. Derecognition proceedings for reasonable cause shall be instituted in accordance with the following:

(a) Derecognition proceedings for failure to adopt or properly enforce a State Plan for Equal Employment Opportunity in Apprenticeship shall be processed in accordance with the procedures prescribed in 29 CFR 30.15.

(b) For causes other than those under paragraph (a) above, the Bureau shall notify the respondent and appropriate State registrants in writing, by certified mail, with return receipt requested. The notice shall set forth the following:

(1) That reasonable cause exists to believe that the respondent has failed to fulfill or operate in conformity with the requirements of this part;

(2) The specific areas of nonconformity;

(3) The needed remedial measures; and

(4) That the Bureau proposes to withdraw recognition for Federal purposes unless corrective action is taken, or a hearing request mailed, within 30 days of the receipt of the notice.

(c) If, within the 30-day period, respondent:

(1) Complies with the requirements, the Bureau shall so notify the respondent and State registrants, and the case shall be closed;

(2) Fails to comply or to request a hearing, the Bureau shall decide whether

recognition should be withdrawn. If the decision is in the affirmative, the Administrator shall forward all pertinent data to the Secretary, together with his findings and recommendation. The Secretary shall make the final decision, based upon the record before him;

(3) Requests a hearing, the Administrator shall forward the request to the Secretary, and the procedures under § 29.9 shall be followed, with notice thereof to the State apprenticeship registrants.

(d) If the Secretary determines to withdraw recognition for Federal purposes, he shall notify the respondent and the State registrants of such withdrawal and effect public notice of such withdrawal. The notice to the registrants shall state that, 30 days after the date of the Secretary's order withdrawing recognition of the State agency, the Department shall cease to recognize, for Federal purposes, each apprenticeship program registered with the State agency unless, within that time, the State registrant requests registration with the Bureau. The Bureau may grant the request for registration contingent upon its finding that the State apprenticeship program is operating in accordance with the requirements of this part and of 29 CFR Part 30, as amended. The Bureau shall make a finding on this issue within 30 days of receipt of the request. If the finding is in the negative, the State registrant shall be notified in writing that the contingent Bureau registration is made permanent.

(e) If the registrant fails to request Bureau registration, or upon a finding of noncompliance pursuant to a contingent Bureau registration, the written notice to such State registrant shall further advise the recipient that any actions or benefits applicable to recognition "for federal purposes" are no longer available to participants in its apprenticeship program.

(f) Such notice shall also direct the State registrant to notify, within 15 days, all its registered apprentices of the withdrawal of recognition for Federal purposes; the effective date thereof; and that such withdrawal removes the apprentice from coverage under any Federal provision applicable to his individual registration under a program recognized or registered by the Secretary of Labor for Federal purposes.

(g) A State Apprenticeship Agency or Council whose recognition has been withdrawn pursuant to this part may have its recognition reinstated upon presentation of adequate evidence that it has fulfilled, and is operating in accordance with, the requirements of this part.

Signed at Washington, D.C., this 4th day of March, 1975.

PETER J. BRENNAN,
Secretary of Labor.

[FR Doc. 75-6070 Filed 3-7-75, 8:45 am]

--End of Section

APPENDIX D

Circular 70-26

June 5, 1970

U.S. DEPARTMENT OF LABOR MANPOWER ADMINISTRATION Bureau of Apprenticeship and Training Washington, D.C. 20210	Distribution BAT-3 BAT-8	SUBJECT Promotion of Apprenticeship Programs with Employers and Employer Groups	CODE: 400
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Purpose: To update the Bureau of Apprenticeship and Training policy in the promotion, development, approval, and registration of apprenticeship programs to be administered by employers or employer groups where local jointly sponsored area-wide trade apprenticeship programs are registered and actively operating.

Background: Bureau responsibility under the National Apprenticeship Act is to provide service and assistance to all industry in the establishment of apprenticeship programs. Such programs must contain standards that assure efficient training procedures that will safeguard the welfare of apprentices. The Bureau personnel has the same responsibility in promoting and developing apprenticeship programs with employers who are not participating in existing registered programs.

Action: Bureau personnel shall assist any bona fide union, employer, or employer group both in response to requests and on BAT initiative to establish apprenticeship programs which meet the minimum requirements as published by the Bureau of Apprenticeship and Training.

Where an active area-wide registered program in the trade exists, the BAT representative shall explain to the potential sponsor the advantages of participating in the ongoing program. If the potential sponsor is not willing to participate, or the sponsors of the existing program will not agree to such participation, BAT representatives shall provide full assistance in the development and registration of an acceptable separate apprenticeship program and register the program when it meets national standards.

The development of a new program shall proceed without undue delay. Issues arising during the development of a program that cannot be satisfactorily resolved locally or at the state and regional level, shall be referred to the Administrator, BAT. If registration is denied by the registration authority, either BAT or SAC, the potential sponsor shall be advised of his appeal rights.

This Circular cancels Circular 66-67, Code 440 dated March 9, 1966, and becomes effective immediately.

APPENDIX E

CONTRACTOR INTERVIEW

1. Company Description

- a. Type of work, specialty
- b. Sales volume, number of employees
- c. Geographic area
- d. Trades employed

2. Why Apprenticeship?

- a. Davis Bacon (federal, state)
- b. Requirements for 1 to 5 on fed job site
- c. Need for this type training
for Journeyman--
for Superintendent--

- d. Other

3. Registration of Program

- a. When?
- b. Opposition--from Union

from BAT

Union Contractor

c. How long to register?

4. Statistics

dYear

of employees

minority employees

Registered apprentices

Min.

Indentured this year

Min.

Graduated this year

Min.

Cancellations this year

Min cancellations

OPERATION

5. Recruitment

a. Describe process

b. How do you select from within your company

c. Input from employees, superintendent, journeymen

6. OJT

a. How tough to rotate, to what extent can you expose apprentice to all job processes

b. Record--is documentation a problem; how accurate; are they gundecked

- c. Assigned to a particular man for training or does he float
- d. Do your journeymen normally work across traditional union jurisdiction lines

If so, how does your OJT reflect this, do you supplement the apprentice program and actively encourage the apprentice to learn this

or

is apprentice excluded from the cross training

- e. Does the apprentice need additional upgrading to work in your organization or does he get all he needs in the apprentice program

7. Related Training

- a. Where done physically
- b. Who is instructor, your opinion of him
- c. Who chooses him
- d. Where does curriculum come from

Vo-Tech catalog

other

- e. Do you feel material is directly applicable or theoretical
- f. What were alternatives to your choice for related training
- g. What are attendance requirements
- h. What courses would you drop or add
- i. Do requirements of licensing exam influence the courses
- j. To what extent does the schedule of course parallel OJT
- k. Does related training reflect any cross trade usage of apprentice and journeymen

Differences from union related training

Are open shop students harassed in any way

- l. When an apprentice graduates does he know everything he needs to know to work in your operation or are additional courses required

8. Cost

- a. Cost of recruitment
- b. Related training
 - 1. Instructors
 - 2. Materials
 - 3. Textbooks
- c. Administrative cost of OJT

9. Wages

- a. Are apprentices paid prescribed minimum wages or more
- b. Could you pay them less if legal

10. Dropouts

- a. How long do you hold an apprentice if he falters in the night program
- b. Why have some of your people dropped out
- c. In general why do people drop out

11. How would you change program if you could

Shorter

Longer

Different courses.

Different entry standards

Different pay

Different apprentice to journeyman ratio

Different work processes

Different reporting requirements

12. Job Security, who do you lay off first

13. Additional

Do you know of anything I haven't touched on that might help me in this study- particularly the differences between your program and union programs

APPENDIX F

APPRENTICE INTERVIEW

1. Background

- a. Education
- b. Married, age
- c. Ties to trade or company (relatives etc)
- d. How did you first hear of the NAT APP PROG

This particular program

e. Motivation (why apprenticeship)

f. Indenture (what steps)

test
application
interview

Any credit for past courses or working experience

g. Alternatives (& why passed up)

union program

helper

military service

other trades or business

h. Expectations (what will this training get you)

security
license
promotion

i. Job security - do you feel that being in an app. prog contributes to your present and future job security

2. OJT

a. Are you assigned to one man or do you get training from several men?
ever work alone

b. Are you rotated often, to what extent do you expect to get training in each of the required work processes

Do you have a copy of the app. handbook

c. How do you keep track of your hours on each task

d. Do you do work considered outside traditional craft lines

e. Do you learn principally by observation, instruction-

f. Scut work, how much time do you spend carrying tools going for everyone's coffee etc

g. Progress, how do you know if you are doing well or poorly

h. After you get your license (if applicable), how do you expect your training to change

3. Related Training

a. Where done

b. Who instructs, your opinion of him

c. What courses are taught

d. Applicable day to day(theoreticle)

e. Grind
how tough
attendance
tests
assignments
how do you think you are doing

f. Do OJT instructors relate your course work to your day work

g. Which courses would you add or eliminate

4. Program in General

- a. How is your program compared to others you have heard of
- b. Your opinion of others in your program, carried etc
- c. Personal cost, lower pay hurting, effect of night program
- d. Do you know of anyone who has dropped out, have you considered dropping out, why
- e. Do you know of anything I haven't touched on that might help me in this study- particularly the differences between your program and a union program.

APPENDIX G

JOURNEYMAN/OJT INSTRUCTOR INTERVIEW

1. Background

- a. Work experience
 - union
 - time in trade

b. Education

2. OJT

- a. Do you sometimes do work considered outside the jurisdiction of a union craftsman.
- b. How does your on job training and apprentice usage differ from a union program- cross craft training

What is your basis of comparison

- c. When an apprentice is assigned to you how does he learn the job at hand,
 - observation
 - briefings
- d. How do you keep score- how well the app. is doing in some areas, where he needs work.

of hours on different types of work

- e. How does he know if he is doing well or poorly

3. Related training

a. Courses, applicable, superfluous

Which would you add, which would you eliminate

Which are of particular importance for the license exam

b. Do you ever attempt to coordinate OJT with night course instruction, or find yourself elaborating on material insufficiently covered in class

c. Teachers, are they good

Do they teach subjects as you would

4. Apprentice program

a. What do you think of this type of training
best way to train
too long
too much time on scut work or as helper

b. How would you change program

c. Is the program attracting and turning out the type of craftsman you enjoy working with

APPENDIX H

RELATED TRAINING INSTRUCTOR

1. Background

a. Experience, how long teaching

ever an app., journeyman

b. How were you selected to teach the course

c. Student interest

2. Course

a. Where did curriculum come from

b. Do you meet on a regular basis with the app. comm.

c. Composition of class

mixed trades

mixed experience

open entry to class

union & open shop

d. Individual coaching or lecture

e. Parallel OJT in any way

f. Special attention given to subjects on license exam

3. Apprenticeship

a. What do you think of the apprentice system

Drop out or failure a problem

b. Do you see any difference in union and open shop programs

Do you teach your course the same way to both, is there pressure to do otherwise



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